CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR ACTIVE DOMESTIC EQUITIES – EXTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous externally managed active domestic equities policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Externally Managed Active Domestic Equities Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with this segment of the U.S. capital markets.

II. STRATEGIC OBJECTIVE

Capturing returns of domestic equity markets while diversifying risk is the strategic objective for the Program.

The Program shall be managed to accomplish the following:

- A. Diversify the System's overall Equity Program by complementing the Passive Domestic Equity Program;
- B. Enhance the expected return of the System's investment program;
- C. Hedge against active member (pre-retirement) liabilities; and
- D. Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Committee delegates the responsibility for administering the

Program to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).

- B. The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee.
 - 2. Developing and maintaining a procedures manual, subject to periodic review and updating, that outlines Staff operational procedures used in implementing this Policy.
 - 3. Implementing and adhering to the Policy.
 - 4. Recommending action concerning outside monev management firm(s) ("Managers") retained under contract to implement the Program. The Staff shall make recommendations in accordance with the Manager Monitoring - Externally Managed Policy, regarding changes in the Manager's contractual guidelines, and any other aspect Staff considers pertinent.
 - 5. Reporting to the Investment Committee, as needed, about the performance of the Program. The Staff shall monitor the implementation of, and compliance with, the Policy. The Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies immediately and in writing to the Investment Committee. Such reports to the Investment Committee shall include explanations of the violations and appropriate recommendations for corrective action.
- C. Managers are responsible for all aspects of portfolio management as set forth in Manager's contract with the System and shall fulfill the following duties:
 - Communicate with the System's Staff, as needed, regarding investment strategies and results. The Investment Committee and Staff expect Managers to monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
 - 2. Cooperate fully with the System's Staff, Custodian, and General Pension Consultant concerning requests for information.

D. The **General Pension Consultant** is responsible for monitoring and evaluating each Manager's performance relative to the benchmark and Policy. The General Pension Consultant shall report to the Investment Committee on a quarterly basis, in accordance with its contract.

IV. PERFORMANCE OBJECTIVE

The Active Domestic Equity Program encompasses the Externally Managed Domestic Equity Strategies and the Internally Managed Dynamic Completion Fund (the DCF). The Program is expected to outperform the custom Wilshire 2500 Index. Within the Program, Managers or portfolios or both are expected to achieve performance objectives as stated in their Investment Management Guidelines.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Approaches

- 1. Active domestic equity strategies shall be identified based upon their ability to add value above a style-specific benchmark on a risk-adjusted basis. The DCF will be used to attempt to neutralize any style bias.
- 2. The Program shall be implemented through the retention of external managers. External manager selection shall occur in accordance with Section V.B. of this Policy.
- 3. The System shall continually review the viability of the program, conducting a formal review at least every five (5) years.

B. External Manager Selection

- 1. The System shall retain managers that have recognized expertise in the analysis and selection of U.S. equity securities or approved derivatives. The selected managers shall be registered, or appropriately exempt from registration, with the Securities and Exchange Commission.
- 2. The System shall select the managers in accordance with the Contract and Procurement Policy.

C. Investment Parameters

The Managers shall operate under a set of specific guidelines that outlines their investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities and procedures, benchmark, and performance objectives.

Implementation of this Program shall comply at all times with the System's investment policies including, but not limited to, the following parameters:

- 1. Statement of Investment Policy for Derivatives External Money Managers;
- 2. Proxy Voting Policies;
- 3. Manager Monitoring Externally Managed Policy; and
- 4. Manager-specific Investment Management Guidelines.

VI. BENCHMARKS

The System shall measure individual Managers against appropriate style benchmarks. The aggregate of the active managers and the Dynamic Completion Fund shall be measured against the System's custom Wilshire 2500 Index.

VII. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the System shall base all calculations and computations on market value as recorded by the System's Custodian.

VIII. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR ACTIVE INTERNATIONAL EQUITIES – EXTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous externally managed active international equities policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Externally Managed Active International Equities Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and capturing returns associated with this segment of the global capital markets.

II. STRATEGIC OBJECTIVES

Capturing returns of international equity markets while diversifying risk is the strategic objective for the Program.

The Program shall be managed to accomplish the following:

- A. Diversify the System's overall Equity Program;
- B. Enhance the expected return of the System's Equity Program;
- C. Hedge against active member (pre-retirement) liabilities; and
- D. Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for

- administering the Program to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- B. The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee.
 - 2. Developing and maintaining a procedures manual, subject to periodic review and updating, outlining Staff operational procedures used in implementing this Policy.
 - 3. Implementing and adhering to the Policy.
 - 4. Recommending action concerning outside money management firm(s) ("Managers") retained under contract to implement the Program. The Staff shall make recommendations in accordance with the Manager Monitoring - Externally Managed Policy, regarding changes in the Manager's contractual guidelines, and any other aspect Staff considers pertinent.
 - 5. Reporting to the Investment Committee, as needed, about the performance of the Program. The Staff shall monitor the implementation of, and compliance with, the Policy. The Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies immediately and in writing to the Investment Committee. Reports made by the Staff to the Investment Committee shall include explanations of the violations and appropriate recommendations for corrective action.
- C. Managers are responsible for all aspects of portfolio management as set forth in each manager's contract with the System and shall fulfill the following duties:
 - 1. Communicate with the Staff, as needed, regarding investment strategy and investment results. The Investment Committee and Staff expect the Managers to monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
 - 2. Cooperate fully with the System's Staff, Custodian, and General Pension Consultant concerning requests for information.

D. The **General Pension Consultant** is responsible for monitoring and evaluating the Managers' performance relative to the benchmark and Policy. The General Pension Consultant shall report to the Investment Committee on a quarterly basis, in accordance with its contract.

IV. PERFORMANCE OBJECTIVE

The Active International Equity Program is expected to outperform the benchmark by at least two (2) percentage points annualized throughout a normal market cycle of three-to-five years, net of fees.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Approaches

- 1. The Active International Equity Portfolio shall be invested to maximize return, within acceptable risk parameters, through the selection of publicly traded equity securities available in international equity markets.
- 2. The Program shall be implemented through the retention of external managers. External manager selection shall occur in accordance with Section V.B. of this Policy.

B. External Manager Selection

- 1. The System shall retain managers with recognized expertise in the analysis and selection of international equity securities or approved derivatives. The selected managers shall be registered, or appropriately exempt from registration, with the Securities and Exchange Commission.
- 2. The System shall select the managers in accordance with the Contract and Procurement Policy.

C. Investment Parameters

The Managers shall operate under a set of specific guidelines that outlines their investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities and procedures, benchmark and performance objectives.

Implementation of this Program shall comply at all times with the applicable System's investment policies including, but not limited to,

the following:

- 1. Permissible Equity for Emerging Equity Markets policy;
- 2. Foreign Exchange Guidelines;
- 3. Statement of Investment Policy for Derivatives External Money Managers;
- 4. Proxy Voting Policies;
- 5. Manager Monitoring Externally Managed Policy; and
- 6. Manager-specific Investment Management Guidelines.

VI. BENCHMARKS

The benchmark for this Program utilizes the CalPERS Financial Times Stock Exchange (FTSE) customized indices. The appropriate FTSE index is applied to each manager depending on its investment mandate.

VII. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the System shall base all calculations and computations on market value as recorded by the System's Custodian.

VIII. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR DEFERRED COMPENSATION STANDARD & POOR'S 500 EQUITY INDEX FUND INTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous Deferred Compensation Standard & Poor's 500 Equity Index Fund - Internally Managed investment policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Deferred Compensation Standard & Poor's 500 Equity Index Fund - Internally Managed ("the Portfolio" or "the Fund"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Fund. Additionally, use of this Policy provides assurance that there is sufficient flexibility in the management process controlling investment risks and returns associated with deferred compensation funds.

II. STRATEGIC OBJECTIVE

Obtaining broad domestic equity market exposure achieved by closely tracking the designated benchmark index is the strategic objective of the Fund.

The Fund shall be managed to accomplish the following:

- **A.** Enhance the total returns of the overall investment program for the participants of the Fund through broad U.S. stock market exposure at low cost;
- **B.** Deliver the performance results of the U.S. stock market defined as the Standard & Poor's 500 Stock Index, with broad stock diversification for the participants of the Fund; and
- **C.** Consider solely the interest of the Fund's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee has delegated the responsibility for administering the Deferred Compensation S&P 500 Equity Index-Fund to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- **B.** The System's Investment Staff ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the System's Investment Committee:
 - Maintaining a procedures manual, subject to periodic reviews and updates, outlining Staff operational procedures used in implementing this Policy;
 - 3. Implementing and adhering to the Policy;
 - 4. Reporting immediately to the Investment Committee all violations of the Policy with explanations and recommendations;
 - 5. Purchasing only securities outlined in the Policy; and
 - 6. Reporting internally to senior management on the implementation of this Policy. This report shall be prepared monthly to include, but is not limited to, the following:
 - a. Current market value of the portfolio; and
 - b. Performance of the portfolio versus the benchmark as reported by the master custodian.
- C. The General Pension Consultant ("the General Pension Consultant") is responsible for monitoring, evaluating, and reporting to the Investment Committee, at least quarterly, the Fund's performance relative to the benchmark and Policy guidelines.

Monitoring shall include placing the Fund on watchlist using the following criteria:

Watchlist Status: If the realized annual standard deviation of monthly return deviations (tracking error) is greater than 20 basis points but less

than 40 basis points for two consecutive quarters, the Fund shall be placed on Watchlist Status.

If the realized annual standard deviation of monthly return deviations (tracking error) exceeds 40 basis points for two consecutive quarters, the Fund shall remain on Watchlist Status and further review may be required.

IV. PERFORMANCE OBJECTIVE

The realized annual standard deviation of such monthly return deviations (tracking error) shall be limited to 20 basis points. That is, 67% of such annual deviations of monthly returns shall be 20 basis points or less; 95% of such annual deviations of monthly returns shall be 40 basis points or less.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Investment Approach

The Fund shall be constructed in a manner that is consistent with achieving the stated performance objective. This shall necessitate a broadly diversified portfolio managed in a passive index approach with risk characteristics closely resembling the benchmark Index. The Fund normally holds all 500 securities in the Index. Since holding the exact number of shares in the benchmark can be expensive and cause constant rebalancing, an optimized index approach may be used to create an index that closely resembles the benchmark characteristics. Periodically, the Fund may consist entirely of derivative instruments to take advantage of mispricing between the cash market and the derivatives market.

The optimization approach to be used for the Fund employs a fundamental risk model. Using this model, the Fund's risk exposures versus those of the benchmark can be defined and decomposed. Fundamental risk models measure stock returns associated with industry and other fundamental factors such as Price/Earnings (P/E), yield, and market capitalization. Such fundamental factors are often referred to as "common" factors. A common factor is an element of return that influences many securities and hence is a "common factor" in the returns on those securities. Based on the Fund's current estimated exposure to industry and common factors, the volatility of returns can be measured. The information about volatility produced by a fundamental risk model can be used to evaluate portfolio risk, decompose portfolio risk according to common factor exposures, and evaluate how much of a portfolio's return in a given period was due to each common factor exposure and how much was due to stock selection.

Tracking error can be minimized by maintaining a portfolio's risk characteristics in line with the benchmark. However, a stock market index is a purely mathematical construction. Its performance shall inevitably be different from that of any actual portfolio. This is generally because indices are constructed mathematically in ways that can never in practice be perfectly replicated. There are technical reasons why a portfolio cannot perfectly track a benchmark index:

- 1. The Index is fully invested at all times. An actual portfolio shall inevitably carry a small amount of cash.
- 2. The Index does not incur any costs, whereas an actual portfolio shall incur transactions costs.
- 3. The Index assumes the dividend is received and its proceeds are reinvested as soon as a stock goes ex-dividend. Thus, dividend proceeds are assumed to earn the Index rate of return from the exdividend date. However, the dividend may not actually be received into the Fund for several weeks.
- Published benchmark return calculations vary. Reasons for variations include, but are not limited to, differences in calculations of outstanding shares for individual securities, timing of additions or deletions of members into the benchmark, or treatment of dividends.
- 5. Next-day contributions that are benchmarked to the prior day's closing price.
- 6. No fees are charged to the Index, but are charged to the fund.

B. Specific Risk Parameters

It is expected that the Fund shall be fully replicated. However, should an event arise such that the Fund cannot be fully replicated, tolerance ranges must be placed on the Fund's risk characteristics relative to those of the benchmark. The Fundamental Risk model decomposes systematic risk into that associated with six "common factors" and fifteen economic sectors.

The common factors are reported as standardized values (by subtracting the capitalization weighted mean for each stock's common factor value, and dividing by the cross sectional standard deviation), thus allowing comparative analysis between different common factor unit values. The six common factors, and their respective tolerance ranges are as follow:

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- 1. **Historical Beta** The Fund's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 2. **Dividend Yield** The Fund's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 3. **Market Capitalization** The Fund's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 4. **Earnings/Price Ratio** The Fund's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 5. **Market/Book Ratio** The Fund's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 6. **Interest Sensitivity** The Fund's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 7. **Economic Sectors** The tolerance range for the fifteen economic sectors in the Fund shall be kept within 35 basis points of the benchmark's exposure. This shall limit monthly tracking error due to each economic sector weighting difference to less than 4 basis points with 95% probability.
- 8. **Non-systematic Risk** (residual risk) This is caused by different individual security weightings in the Fund–relative to that of the index. Securities in the Fund in excess of +/- 3 basis points of the security's weight in the Index, shall be screened and evaluated for possible action to decrease/increase the security's weight in the Fund towards the benchmark weight.
- 9. **Model Risk** This addresses whether the model used to forecast risk produces an unacceptably large bias in the portfolio optimization.

C. Restrictions

All risk characteristics of the portfolio must be within the permissible ranges specified in Part V.B.

D. Permissible Securities

- 1. Common stock and ADRs included within the Standard & Poor's 500 Index.
- 2. The Fund may temporarily hold common stocks and ADRs, which are not represented in the designated benchmark. Such holdings are justified on the basis of the following:
 - Liquidity constraints or excessive transaction costs, such as those required to sell certain securities obtained from corporate actions or from past benchmark reconstitutions;
 - b. Timing of corporate action processing; and
 - c. Expectation of inclusion in the benchmark due to announced changes in benchmark constitution.

E. Corporate Actions

Corporate actions (e.g., tender offers, mergers, Dutch-auctions, and spinoffs) shall be managed on a case-by-case basis.

F. Rebalancing and Trading Activity

It is expected that the Fund shall be fully replicated. However, if there is a decision to re-balance the Fund, it shall be primarily based upon analysis of the monthly risk and performance attribution reports. Fund rebalancings shall be performed as is deemed necessary to maintain the Fund's risk characteristics in line with those of the benchmark. At a minimum, the Fund shall be reviewed monthly. Internal Equity Optimizer software shall be used to affect the rebalancings. The normal objective function of the optimization is to reduce systematic and nonsystematic risk of the Fund relative to the benchmark while minimizing transaction costs.

A variety of trading techniques and liquidity sources shall be utilized to obtain the best execution of the approved internal trade list.

VI. BENCHMARK

The benchmark shall be the Standard & Poor's 500 Index (with dividends reinvested). This benchmark is capitalization weighted, designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

VII. GENERAL

- **A.** Terms in this policy are defined in a master glossary of terms.
- **B.** Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations on a market value basis as recorded by the System's Custodian.

VIII. DERIVATIVES AND LEVERAGE POLICY

Derivative instruments may be used to facilitate cost and risk management of investing in stocks publicly traded in the U.S.

A. Permitted Strategies

- Substitution When the characteristics of the derivative sufficiently parallel those of the cash market instrument, the derivative may be a substituted for the cash market instrument. This strategy is particularly useful when investing cash flow or liquidating investments, as the derivative can be used to manage market entry and exit points more precisely.
- 2. Risk Control When characteristics of the derivative instrument or a combination of derivatives sufficiently parallel those of the cash market instrument, an opposite position in the derivative can be taken from the cash market instrument to alter the exposure to or the risk (volatility) of the cash instrument. This strategy is useful to manage risk without having to sell the cash instrument.
- 3. Arbitrage When the price of a derivative is more attractive than either the cash market instrument or another related derivative, then the cheaper derivative is purchased, or swapped for the cash market instrument to garner the short-term return potential from the mispriced instrument. This strategy is used to capture mispricing in the derivative instrument relative to either the cash market instrument or another derivative.

B. Uses

- 1. To equitize cash and dividends receivable;
- 2. To capture mispricings between the futures contract and the underlying basket of securities; and
- 3. To lower transaction costs.

C. Restrictions

- 1. Leverage is prohibited. The use of derivative instruments as specified in this Policy shall not constitute leverage.
- 2. Uncovered call writing when constituting leverage is prohibited.
- 3. Traders are limited in their authorization to trade permissible derivative instruments to only the notional value of the portfolio.
- 4. Speculation is prohibited.

D. Permissible Derivatives

Permissible derivatives may include, but are not limited to, the following:

- 1. Index Futures:
- Index Options;
- 3. Options on individual stocks contained in the Index; and
- 4. Swaps that provide for the receipt of cash flows to equal the rate of return of the S&P 500 Index or any of its constituents.

E. Permissible Short-term Investments

Short-term investments are used in connection with the aforementioned Derivatives Policy. For most derivatives, collateral is required for initial margin purposes. The cash in excess of initial margin is then invested in other short-term investments. The following short-term investments are permitted:

 Investments issued and backed by the full faith and credit of U. S. Treasury;

- 2. Commercial Paper rated A2/P2 or better; and
- 3. State Street Investment Fund (STIF).

F. Counter-party Requirements

- 1. Counter-party creditworthiness shall be equivalent to "investment grade" of "A3" as defined by Moody's Investor Service or "A-" by Standard and Poor's. The use of counter-parties holding a split rating with one of the ratings below A3/A- is prohibited. Staff shall notify the Chief Investment Officer if a counter-party is downgraded below A3/A- while an instrument held in the Fund is outstanding with the specific counter-party. The use of unrated counter-parties is prohibited.
- 2. For non-exchange traded derivatives, if the notional amount is greater than the lesser of \$10 million or 1% of the total Fund, then Staff shall not proceed without an opinion from the General Pension Consultant. The General Pension Consultant's positive opinion is required before an investment can be made. The General Pension Consultant shall provide a written opinion on the particular derivative strategy and the Investment Staff shall evaluate the potential counter-party exposure. The Chief Investment Officer and Senior Investment Officer for Public Markets must approve each non-exchange traded derivative transaction in advance.

G. General Requirements

- 1. The proportion of portfolio value invested in derivative instruments can grow to 100% depending on liquidity constraints and the specific strategy employed.
- 2. Managers must rely on the master custodian to reconcile daily cash and margin positions.

IX. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR DOMESTIC ENHANCED INDEX STRATEGY – EXTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Externally Managed Domestic Enhanced Indexing Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with this segment of the U.S. capital markets.

II. STRATEGIC OBJECTIVE

Providing consistent excess returns above domestic equity markets while controlling risk is the strategic objective for the Program.

The Program shall be managed to accomplish the following:

- A. Diversify the System's overall Equity Program by complementing the Passive and Active Domestic Equity Programs;
- B. Enhance the expected return of the System's investment program;
- C. Hedge against active member (pre-retirement) liabilities; and
- D. Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Committee delegates the responsibility for administering the

Program to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).

- B. The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee.
 - 2. Developing and maintaining a procedures manual, subject to periodic review and updating, that outlines Staff operational procedures used in implementing this Policy.
 - 3. Implementing and adhering to the Policy.
 - 4. Recommending action concerning outside monev management firm(s) ("Managers") retained under contract to implement the Program. The Staff shall recommendations in accordance with the Manager Monitoring - Externally Managed Policy, regarding changes in the Manager's contractual guidelines, and any other aspect Staff considers pertinent.
 - 5. Reporting to the Investment Committee, as needed, about the performance of the Program. The Staff shall monitor the implementation of, and compliance with, the Policy. The Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies immediately and in writing to the Investment Committee. Such reports to the Investment Committee shall include explanations of the violations and appropriate recommendations for corrective action.
- C. **Managers** are responsible for all aspects of portfolio management as set forth in Manager's contract with the System and shall fulfill the following duties:
 - Communicate with the System's Staff, as needed, regarding investment strategies and results. The Investment Committee and Staff expect Managers to monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
 - 2. Cooperate fully with the System's Staff, Custodian, and General Pension Consultant concerning requests for information.

D. The **General Pension Consultant** is responsible for monitoring and evaluating each Manager's performance relative to the benchmark and Policy. The General Pension Consultant shall report to the Investment Committee on a quarterly basis, in accordance with its contract.

IV. PERFORMANCE OBJECTIVE

The Program shall use an appropriate US large capitalization core equity index for a benchmark and shall produce an excess return, net of fees and costs, of 1.00% per annum with an annual tracking of 2.00%-2.50%. The Program shall contribute positively to the excess return results of the Domestic Equity Program by exceeding the return of the CalPERS Custom Wilshire 2500 Index.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Approaches

- 1. Acceptable investment approaches may include equity-based and synthetic strategies.
 - a. Enhanced index domestic equity-based strategies shall be identified based upon their ability to add value above an appropriate benchmark on a risk-controlled basis. The managers are expected to add consistent alpha above the passive index by controlling tracking error at a level that is below traditional active management. The DCF will be used to attempt to neutralize any style bias.
 - b. Enhanced index domestic synthetic strategies shall be identified based upon their ability to add value above an appropriate benchmark on a risk-adjusted Synthetic strategies shall be managed to maximize return and minimize risk through the use of equity index futures and/or swaps for underlying equity exposure and managing fixed income securities to add excess return. The fixed income portion will be managed by the selection and allocation across sectors, maturities, durations, credits, and approved derivative instruments. In addition, the managers will consider macro and relevant micro-economic factors including, but not limited to, economic growth, inflation, monetary and fiscal policy, the credit risk of market and issuer, and risk-adjusted This program shall be invested in investment vields.

grade securities (securities rated no lower than Baa by Moody's Investor Service, or BBB by Standard & Poor's) or their equivalent; unless specified otherwise in the manager specific Investment Manager Guidelines, up to a maximum of 10% in below investment grade securities (securities rated no lower than B by Standard & Poor's).

- 2. The Program shall be implemented through the retention of external managers. External manager selection shall occur in accordance with Section V.B. of this Policy.
- 3. The System shall continually review the viability of the program, conducting a formal review at least every five (5) years.

B. External Manager Selection

- 1. The System shall retain *equity-based* managers that have recognized expertise in the analysis and selection of U.S. equity securities or approved derivatives. The selected managers shall be registered, or appropriately exempt from registration, with the Securities and Exchange Commission.
- 2. The System shall retain *synthetic* managers with recognized expertise in the analysis and selection of fixed income securities, credit analysis, approved derivatives, and the ability to efficiently and effectively roll equity index futures. The selected managers shall be registered, or appropriately exempt from registration, with the Securities and Exchange Commission.
- 3. The System shall select the managers in accordance with the Contract and Procurement Policy.

C. Investment Parameters

The Managers shall operate under a set of specific guidelines that outlines their investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities and procedures, benchmark, and performance objectives.

Implementation of this Program shall comply at all times with the System's investment policies including, but not limited to, the following parameters:

- 1. Statement of Derivatives Investment Policy for External Money Managers;
- 2. Proxy Voting Policies;
- 3. Manager Monitoring Externally Managed Policy; and
- 4. Manager-specific Investment Management Guidelines.

VI. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the System shall base all calculations and computations on market value as recorded by the System's Custodian.

VII. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR DOMESTIC ENHANCED INDEX STRATEGY- INTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous domestic enhanced index strategy - internally managed investment policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Domestic Enhanced Index Strategy - Internally Managed ("the Strategy"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Strategy. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and capturing investment opportunities.

II. STRATEGIC OBJECTIVE

Diversifying the domestic equity segment through a risk-controlled, value-added strategy with a low correlation of returns to the System's other active and passive investments is the strategic objective of the Strategy.

The Strategy shall be managed to accomplish the following:

- 1. Enhance the System's total return;
- 2. Hedge against active (pre-retirement) liabilities;
- 3. Provide diversification to the System's overall investment program; and
- 4. Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for administering the Strategy

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- portion of the System through the Delegations of Authority (Delegation Nos. 89-13 and 95-50).
- B. The **System's Investment Staff** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee:
 - Maintaining a procedures manual, subject to periodic reviews and updates, outlining Staff operational procedures used in implementing this Policy;
 - 3. Implementing and adhering to the Policy;
 - 4. Reporting all violations of the Policy immediately to the Investment Committee. The Staff's report shall include explanations and recommendations:
 - 5. Purchasing only those securities that are outlined in the Policy;
 - 6. Reporting internally to senior management concerning the implementation of this Policy. The Staff's report shall be prepared monthly and shall include, but not be limited to the following:
 - a. Current market value of the portfolio;
 - b. Performance of the portfolio versus the Benchmark as reported by the prime broker; and
 - c. Performance attribution analysis that attributes return to its causes.
 - 7. The Staff shall develop and maintain specific Watchlist Criteria detailing the qualitative and quantitative factors to evaluate managers.
- C. The **General Pension Consultant** ("General Pension Consultant") is responsible for monitoring and evaluating the portfolio's performance and making reports concerning the performance to the Investment Committee. The General Pension Consultant shall report to the Investment Committee, at least quarterly, the performance relative to the Benchmark and Policy guidelines. The General Pension Consultant is responsible for reporting any non-compliance issues in accordance with its responsibilities under its contract with the System.

IV. PERFORMANCE OBJECTIVE

Enhancing the return of a portion of the Internally Managed Domestic Equity Index Fund is the performance objective of the Strategy. The performance objective shall be accomplished by obtaining the highest active return at the specified target active risk level.

V. INVESTMENT APPROACH AND PARAMETERS

A. Investment Approach

To achieve the stated performance objective, the Strategy uses four components in the active equity investment process: Stock Selection, Risk Control, Transaction Cost Control, and Portfolio Construction. The four components are described as follows:

Stock Selection

The Strategy uses a quantitative stock selection model to estimate the expected relative return of all stocks within the stock selection universe. The stock selection universe shall be the Wilshire 5000 Index. The stock selection strategy shall diversify across many different types of factors to avoid heavy reliance on any one source of returns should a factor underperform for an extended period. The expected factor returns in the stock selection strategy shall adapt over time with the realized factor returns.

2. Risk Control

The initial target level of risk in the active portfolio shall be 50 basis points above the base level of active risk in the set of instruments used to mimic the Benchmark. The maximum target level of risk in the active portfolio shall be 300 basis points above the base level of active risk in the set of instruments used to mimic the Benchmark.

The level of exposure to common factors associated with undesirable risk in the active portfolio shall be minimized by applying an increasing penalty to such exposures. Holding a large number of stocks shall diversify the level of specific risk in the active portfolio. Additionally, the percentage weight of any stock in the active portfolio shall be constrained to be less than $\pm 2\%$ to further control the specific risk of individual stock positions.

3. Transaction Cost Control and Trading Activity

A model of the fixed and variable transaction costs shall be used to offset expected returns by the costs of trading. As a result of such action, the amount of portfolio turnover shall be determined within the optimization process. The forecast of trading cost for each stock shall be based on it's bid/ask spread, historical volume and volatility, and the market center in which it is traded.

The Strategy shall use a variety of trading techniques and liquidity sources to obtain best execution of the trade list.

4. Portfolio Construction

At least monthly (or more often, as needed) an optimization process shall be performed. The optimization process shall ensure that valuable time-sensitive stock selection information is implemented in a timely manner and that the portfolio risk characteristics are adequately controlled. The System shall continually monitor and improve the estimates for expected returns, risks, and transaction costs in order to maximize the actual value added to the Strategy from the active investment process.

B. Restrictions

- 1. Foreign incorporated securities (including ADRs) shall not be held in the portfolio for investment. Such securities received in corporate actions or through a change in classification shall be liquidated as is feasible.
- 2. The Strategy is prohibited from transacting in shares of Real Estate Investment Trusts (REITs).
- 3. To ensure the liquidity of the active portfolio holdings, the active portfolio holdings shall be limited to 200% of the stock's one-month average daily trading volume. Daily trading in any stock is limited to no more than 35% of its one-month average daily trading volume.
- 4. The Fund is prohibited from transacting in shares of tobacco stocks.

C. Permissible Securities

Equity securities of publicly traded companies headquartered in the U.S.

D. Corporate Actions

Corporate actions (e.g., tender offers, mergers, Dutch-auctions, and spinoffs) shall be handled on a case-by-case basis, referring issues that require in-depth analysis to the Research Unit.

E. Attribution Analyses

The portfolio's cash, liquidity, active performance, and risk characteristics shall be monitored and reported through the attribution reports described below in-numbers one through three. The reports shall determine any necessary rebalancing of the actual portfolio or additional model research due to issues highlighted in these reports.

1. Performance Attribution Report

A performance attribution report shall be generated at least monthly decomposing active performance into that due to common factors, including industries, and that due to stock-specific sources.

2. Forecasted Risk Attribution Report

A risk-attribution report shall be generated at least monthly decomposing the forecasted active risk into that due to common factors, including industries, and that due to stock-specific sources.

3. Cash Position Report

A cash report shall be generated at least monthly displaying the account equity, long, short, and net cash balances, and the leverage ratio.

4. Liquidity Report

A liquidity report shall be generated at least monthly displaying the percentage of total market capitalization of each stock held. The report shall also display the percentage of one-month average daily trading volume, on a total and active basis, and on a portfolio and individual name basis.

VI. BENCHMARK

The benchmark for the Strategy shall be the CalPERS Custom Wilshire 2500 Index ("the Benchmark") excluding REITs and tobacco stocks (with dividends reinvested). This Benchmark is a customized capitalization-weighted portfolio constructed and shall be maintained by Wilshire Associates. The Benchmark's

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composition is designed to provide broad market exposure to the total U.S. equity market while minimizing transaction costs. The Index is composed of the top 2500 securities of the Wilshire 5000 Index. The Index is based on market capitalization, and is reconstituted annually. The Wilshire 5000 Index measures the performance of all U.S. headquartered equity securities with readily available price data.

VII. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations on a market value basis as recorded by the System's custodian.

VIII. DERIVATIVES AND LEVERAGE POLICY

A. Strategies

Leverage shall be used in the form of borrowed securities. In cases where the Benchmark portfolio does not contain a large enough percentage of the stock to facilitate the desired percentage of underweighting relative to the Benchmark, borrowing the securities from a broker and selling them short shall facilitate the additional desired underweighting. The proceeds from the sale of these borrowed securities shall be used to finance the offsetting overweighting of other stocks relative to the Benchmark; consequently, the Strategy remains fully invested.

Financial futures, options, and swaps may be utilized in the portfolio, in accordance with the System's Derivatives Policy, as it may be amended, for the following purposes:

- 1. To permit the investment of dividends received.
- 2. To equitize cash and dividends receivable.
- 3. To allow adjustment of the portfolio's risk characteristics in the most cost effective and efficient manner available.
- 4. To facilitate investment of cash flows related to contributions, withdrawals, or asset allocation compliance.

B. Justification

1. Leverage

Necessary to achieve underweights of stocks in the portfolio through short-selling of securities, in accordance with the strategic objective of obtaining the highest active return at the specified target active risk level.

Derivatives

- a. Allow the establishment of a cash buffer.
- b. Used to lower transaction costs compared with the purchase of underlying securities.
- c. High correlation to returns of the Benchmark Index.
- d. Provide the ability to alter risk characteristics versus the Benchmark without disrupting the underlying portfolio or unnecessarily increasing turnover.

C. Restrictions

- Uncovered call writing is prohibited.
- 2. Traders are limited in their authorization to trade stock index futures to 1000 long contracts and 1000 short contracts, without prior written authorization from management.

D. Permissible Derivatives

Exchange-traded and over-the-counter derivatives shall be utilized in the index portfolio. These may include, but are not limited to the following:

- Equity Swaps
- Index Futures
- Style Futures
- 4. Index Options

E. Futures Commission Merchants (FCM)

FCMs are selected based on a broad range of criteria, which includes the following factors:

- Low cost clearing and executing charges;
- 2. Securely capitalized firm;
- 3. Clear account statements and efficient reconciliations;
- 4. Responsive personnel;
- 5. Discrete and efficient operation;
- 6. Personal interview; and
- 7. Reference checks.

IX. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR DOMESTIC EQUITY INDEX FUND – INTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption, and supersedes all previous domestic equity index fund - internally managed investment policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Domestic Equity Index Fund - Internally Managed ("the Fund" or "the Portfolio"). Throughout this Policy, Fund and Portfolio are used interchangeably. The design of this Policy ensures that the investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the fund. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling risks and capturing returns associated with this segment of investments.

II. STRATEGIC OBJECTIVE

Obtaining broad domestic equity market exposure achieved by closely tracking the designated benchmark index is the strategic objective of the Fund.

The Fund shall be managed to accomplish the following:

- 1. Enhance the System's total return;
- 2. Hedge against active (pre-retirement) liabilities;
- 3. Provide diversification to the System's overall investment program and:
- 4. Consider solely the interest of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for

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administering the Fund portion of the System to the Investment Staff through the Delegation of Authority (Delegation No. 89-13 and 95-50).

- B. The CalPERS Investment Staff ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the CalPERS Investment Committee;
 - 2. Maintaining a procedures manual, which is subject to periodic review and updates, outlining Staff operational procedures used in implementing this Policy;
 - 3. Implementing and adhering to the Policy;
 - 4. Reporting immediately to the Investment Committee all violations of the Policy with explanations and recommendations;
 - 5. Purchasing only securities that are outlined in this Policy; and
 - 6. Reporting internally to senior management on the implementation of this Policy. This report will be prepared monthly to include, but is not limited to the following:
 - a. Current market value of the portfolio;
 - b. Performance of the portfolio versus the benchmark as reported by the master custodian; and
 - c. Performance attribution analysis which accredits return to its causes.
- C. **The General Pension Consultant** ("General Pension Consultant") is responsible for monitoring, evaluating, and reporting to the Investment Committee, at least quarterly, the performance relative to the benchmark and policy guidelines. The General Pension Consultant is responsible for reporting non-compliance issues with its contract with the System.

Monitoring shall include placing the Fund on Watchlist Status using the following criteria:

Watchlist Status: If the realized annual return deviation is less than -70 basis points for two consecutive quarters, and the forecasted

tracking error is greater than 50 basis points, then the Portfolio will be eligible for watchlist.

IV. PERFORMANCE OBJECTIVE

Achieving the return for the broad domestic equity market is the performance objective of the Fund. To accomplish this objective, using statistical models to approximate the return of the market, rather than replicate, is more cost effective.

Return deviations between the Portfolio and the designated benchmark will be random, as expected. To account for the difference in the methodology for calculating the returns of the benchmark and the Portfolio, the resulting return deviation may require an adjustment. The System shall set parameters in the statistical models it employs in such a manner that forecasted tracking error shall be within $\pm\,50$ basis points and that realized returns should fall no more than 50 basis points below the benchmark over any 12 month period. However, the System shall allow wider tracking error and return deviation when they result from a deliberate decision to reduce turnover or to control a specified risk contained in the Portfolio.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Investment Approaches

Investors, managers, consultants, or other participants selected by the System shall passively manage the portfolio. The construction of the Portfolio shall achieve the stated performance objective. An Optimized sampled approach shall be used to generate an actual portfolio with risk characteristics closely resembling the benchmark. A portfolio created with fewer stocks than the benchmark will avoid large transaction costs.

The optimization approach shall employ a fundamental risk model to define and decompose the Portfolio's risk exposures versus those of the benchmark. Fundamental risk models measure stock returns associated with industry and other fundamental factors such as price/earnings (P/E), yield, and market capitalization. Such fundamental factors are referred to often as "common" factors.

A common factor is an element of return that influences many securities and, hence, is a "common factor" in the returns on those securities. Based on the current Portfolio's exposure to industry and common factors, the volatility of returns can be measured. The information about volatility produced by a fundamental risk model can be used to evaluate portfolio risk, decompose portfolio risk

according to common factor exposures, and evaluate how much of a portfolio's return in a given period was due to each common factor exposure and how much was due to stock selection.

B. Tracking

Maintaining a portfolio's risk characteristics in line with the benchmark can minimize return deviation. A stock market index is a purely mathematical construction. Its performance will inevitably be different from that of any actual portfolio. This is generally because indices are constructed in mathematically sound ways that can never, in practice, be replicated. The following list highlights technical reasons why a portfolio will not perfectly track a benchmark index:

- 1. The index is fully invested at all times. An actual portfolio will inevitably carry minimal cash equivalents.
- Transaction costs are incurred while investing cash flow, rebalancing the index fund exposure to meet asset allocation requirements, meeting index reconstitution and income reinvestment requirements.
- 3. Dividends are treated in an unrealistic way. The index assumes the dividend becomes available as soon as a stock goes ex-dividend and, thus, earns the equity rate of return. The dividend may not actually be received into the portfolio for several weeks.
- 4. The System's custodian calculates performance using a monthly internal rate of return methodology, while the methodology used for the benchmark index is time weighted (linked daily).
- 5. The annual reconstitution of the benchmark index causes turnover in the benchmark, but no transaction costs are incurred by the benchmark index. In order to minimize transaction costs in the portfolio, the transition to the reconstituted benchmark will be done gradually rather than in one day. Some securities which are deleted from the benchmark are retained in the portfolio because they generate little or no return deviation.

Because the portfolio must incur transaction costs to purchase and sell securities, a trade-off must be made between incurring transaction costs and minimizing return deviation. Since transaction costs are always negative and will reduce the value of the portfolio, while return deviation

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can be positive or negative, consideration will be given to accepting greater return deviation.

6. There is a time lag between when the benchmark is reconstituted annually and when the System receives the updated constituent information.

C. Specific Risk Parameters

Specific risk parameters shall limit the return deviation of the portfolio versus the benchmark. A number of models shall ensure that the risk parameters are within an acceptable tolerance level to achieve the performance objective. Since the System shall add or eliminate models, the specific risk parameters for each model are detailed in the Procedures Manual.

D. Restrictions

- 1. Foreign incorporated securities (including ADR's) shall not be held in the Portfolio for investment. Such securities received in corporate actions or through a change in classification shall be liquidated as cost effective as possible.
- 2. The Fund is prohibited from purchasing shares of Real Estate Investment Trusts (REITs).
- 3. Individual security positions are limited to no more than 5% of the outstanding shares for the security. The System may maintain security positions that exceed this limit if a cost/benefit analysis of holding versus selling the position demonstrates an adverse effect on the tracking goals. However, individual security positions shall be limited to 10% of the outstanding shares. To comply with the limit, securities exceeding the limit shall be liquidated.
- 4. The Portfolio may not purchase the securities of primary tobacco companies as identified by the Investor Responsibility Research Center Tobacco Company List.

E. Permissible Securities

- 1. Equity securities of publicly traded companies headquartered in the U.S.
- 2. The Portfolio may hold securities not represented in the designated benchmark. Generally, these holdings in aggregate shall be limited to less than 3% of the Portfolio's

total market value. Such holdings are justified by the following reasons:

- Liquidity constraints or excessive transaction costs, such as those required to sell certain securities obtained from corporate actions or from past benchmark reconstitutions; and
- b) Expectation of inclusion in the benchmark at the next annual reconstitution.

F. Corporate Actions

Corporate actions (e.g., tender offers, mergers, Dutch-auctions, or spin-offs) shall be handled on a case-by-case basis, with issues requiring in-depth analysis being referred to the Research Unit. Spin-offs will be added to the benchmark if the new security's equity capitalization exceeds \$500 million on the date the security spun-off; otherwise, the security may be a candidate for inclusion in the annual reconstitution.

Companies which offer discount Dividend Reinvestment Programs (DRIP) will be analyzed to determine if return enhancement can be added by participating in such programs.

G. Rebalancing and Trading Activity

The decision to rebalance the Portfolio is primarily based upon analysis of the monthly risk and performance attribution reports. Portfolio rebalancings shall be performed as necessary to maintain the Portfolio's risk characteristics parallel with those of the benchmark. At a minimum, the Portfolio shall be reviewed annually at the reconstitution. The Risk Model Optimizer will be used to affect the rebalancings. The normal objective function of the optimization is to reduce systematic and nonsystematic risk of the portfolio while minimizing transaction costs.

A variety of trading techniques and liquidity sources shall be utilized to obtain best execution of the approved internal trade list.

Transaction cost analysis shall be performed and evaluated on a quarterly basis for monitoring trading efficiency as compared to that of a like universe. An outside vendor may prepare this analysis.

H. Attribution Analyses

1. Performance Attribution Report

A performance attribution report concerning the Fund shall be generated monthly to ascribe performance to common factors, economic or industry sectors, and stock selection. Returns shall be analyzed to determine where performance is derived and if any appropriate adjustments should be made to the Portfolio.

2. Risk Attribution Summary

A risk attribution report shall be generated monthly displaying the total, systematic, and non-systematic risk of the Portfolio relative to the benchmark. Risk characteristics of the Portfolio relative to that of the benchmark can be analyzed to determine if any imbalances exist and if appropriate adjustments should be made to the Portfolio.

3. Bias Performance Report

A bias performance report shall be generated within the month to display the Portfolio's performance versus that of the benchmark month-to-date. This report shall show how each economic or industry sector of the Portfolio is performing relative to that of the benchmark. The report shall also show how each stock within the Portfolio is performing relative to the stock's weighting within the benchmark.

4. Over/Under Weighting Report

An over/under weight report shall be generated monthly displaying stocks with weights five basis points or greater than the benchmark weight. These stocks shall be screened and evaluated for possible action to decrease/or increase the security's weight in the Portfolio towards the benchmark weight.

VI. BENCHMARK

The benchmark for the Fund shall be entitled the "CalPERS Custom Wilshire 2500 Index ("the Benchmark"). This custom benchmark shall be constructed and maintained by Wilshire Associates. It shall be defined as the top 2500 securities of the Wilshire 5000 (excluding REITs and tobacco stocks) with dividends reinvested, and be based on market capitalization and annual reconstitution. Its composition shall provide broad market

exposure to the total U.S. equity market while minimizing transaction costs.

VII. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the system shall make all calculations and computations on a market value basis as recorded by the System's Custodian.

VIII. DERIVATIVES AND LEVERAGE POLICY

A. Strategies

The Fund may utilize financial futures, swaps, and options in the Portfolio for the following purposes:

- 1. Permitting the investment of dividends received;
- Equitizing cash and dividends receivable;
- 3. Allowing adjustment of the portfolio's risk characteristics in the most cost effective manner available;
- 4. Facilitating investment of cash flows related to contributions, withdrawals, or asset allocation compliance.

B. Justification

Justification for the above mentioned strategies includes the following:

- Comparing lower transaction costs with the purchase of underlying securities;
- 2. Correlating to price movement of benchmark index; and
- 3. Providing the ability to alter risk characteristics versus the benchmark without disrupting the underlying portfolio or unnecessarily increasing turnover.

C. Restrictions

Restrictions on the above mentioned strategies include the following:

- 1. Writing uncovered calls is prohibited;
- 2. Leveraging is prohibited. The use of futures contracts as specified in this Policy will not constitute leverage;
- 3. Trading non-exchange traded derivatives is prohibited;
- 4. Speculating is prohibited; and
- 5. Authorizing trade of S&P 500 stock index futures to 1000 long contracts and 1000 short contracts, without prior written authorization from management, is limited.

D. Permissible Derivatives

Derivatives utilized in the index portfolio may include, but are not limited to the following:

- 1. Index futures
- Style futures
- 3. Index options
- 4. Equity swaps

E. Futures Commission Merchants (FCM)

Future Commission Merchants are selected with the following broad range of criteria:

- 1. Low cost clearing and executing charges;
- 2. Securely capitalized firm;
- Clear account statements and efficient reconciliation:
- 4. Responsive personnel;
- 5. Discrete and efficient operation;
- 6. Personal interview; and
- 7. Reference checks.

IX. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR DYNAMIC COMPLETION FUND – INTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous internally managed dynamic completion fund investment policies

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Dynamic Completion Fund - Internally Managed ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling risks and capturing returns associated with this segment of the capital markets.

II. STRATEGIC OBJECTIVE

Reducing style bias caused by the Active Domestic Equity Managers relative to the System's Custom Wilshire 2500 Index is the strategic objective of the Program. The Dynamic Completion Fund Portfolio ("the Portfolio") is a specialized, passively managed domestic equity portfolio structured to complement the Active Domestic Equity Managers' Portfolios. Outperforming the System's Custom Wilshire 2500 Index by means of the aggregate returns net of fees for the Dynamic Completion Fund and the Domestic Active Managers' Portfolios is the strategic objective of the Active Domestic Equity Program. The Dynamic Completion Fund Program shall provide a vehicle for facilitating manager transitions while minimizing transaction costs.

The Portfolio shall be managed to accomplish the following:

- 1. Enhance the System's total return and risk control capabilities;
- 2. Hedge against active (pre-retirement) liabilities;
- 3. Provide diversification to the System's overall investment program;

- 4. Reduce style bias of the aggregate Active Domestic Equity Managers' Portfolios;
- 5. Facilitate the transition of managers or change in manager allocations in a cost effective manner; and
- 6. Consider solely the interest of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy and delegated the responsibility for administering the Program portion of the System to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- B. The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee:
 - Developing and maintaining a procedures manual subject to periodic review and updating that outlines Staff operational procedures used in implementing this Policy;
 - 3. Implementing and adhering to the Policy;
 - 4. Reporting immediately to the Investment Committee all violations of the Policy with explanations and recommendations;
 - 5. Purchasing only securities that are outlined in the Policy; and
 - 6. Reporting internally to senior management on the implementation of this Policy. This report will be prepared monthly to include, but is not limited to, the following:
 - a. Current market value of the Portfolio:
 - b. Performance of the Portfolio versus the benchmark as reported by the master custodian; and
 - c. Performance attribution analysis which attributes return to its causes.

C. The **General Pension Consultant** ("the General Pension Consultant") is responsible for monitoring and evaluating the Fund's performance relative to the benchmark and Policy. The General Pension Consultant shall report to the Investment Committee on a quarterly basis, in accordance with its contract.

Monitoring shall include placing the Portfolio on Watchlist Status using the following criteria:

- 1. If the realized annual return deviation is less than -225 basis points, but greater than -300 basis points for two consecutive quarters, and the forecasted tracking error is greater than 150 basis points, then the Portfolio shall be placed on watchlist status.
- 2. If the realized annual return deviation is less than -300 basis points for two consecutive quarters, and the forecasted tracking error is greater than 150 basis points, then the portfolio shall remain on Watchlist Status and further review may be required.

IV. PERFORMANCE OBJECTIVE

Achieving the return for the broad domestic equity market is the performance objective. To accomplish this objective, using statistical models to approximate the return of the market rather than replicate it is more cost effective.

Return deviations between the Portfolio and the designated benchmark will be random, as expected. To account for the difference in the methodology calculating the returns for the benchmark and the portfolio, the resulting return deviation may require an adjustment. The System shall set the parameters in the statistical models it employs in such a manner that forecasted tracking error shall be within \pm 150 basis points. Realized returns should fall no more than 150 basis points below the benchmark during any 12-month period. However, the System shall allow wider tracking error and return deviation when they result from a deliberate decision to reduce turnover or to control a specified risk contained in the Portfolio.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Investment Approach

Investors, managers, consultants, or other participants selected by the System shall passively manage the Portfolio. The construction of the Portfolio shall achieve the stated performance objective. An optimized sampled approach shall be used to generate an actual portfolio with risk characteristics closely resembling the benchmark. Creating a portfolio with fewer stocks than the benchmark will help avoid large transaction costs.

The optimization approach shall employ a fundamental risk model to define and decompose the Portfolio's risk exposures versus those of the benchmark.

B. Tracking

Maintaining the actual portfolio's risk characteristics in line with those of the benchmark shall minimize the return deviation. However, a Program benchmark embodies a complex set of construction procedures and may change dynamically through time.

Aside from risk exposure variations, other reasons for tracking errors include the following:

- The Program benchmark assumes full investment at all times. An actual portfolio inevitably carries minimal investment in cash equivalents due to the timing of purchases and sales as well as the accrual of dividends and distributions versus actual payments.
- 2. The System's Custodian calculates performance using a monthly internal rate of return methodology, while the methodology used for the benchmark index is time weighted.
- 3. The Program benchmark shall be reconstructed at least quarterly. Additionally, the benchmark shall be reconstituted any time a change occurs in the allocations to the active managers. There are changes in the Program benchmark due to changes in the manager(s)' benchmarks or the System's Custom Wilshire 2500 Index.
- 4. The benchmark does not reflect any transaction costs, whereas an actual portfolio incurs transaction costs. To minimize transaction costs in the actual portfolio at reconstitution, the transition of the actual portfolio to reflect changes in the benchmark will be done gradually. Some

securities that are deleted from the benchmark are retained in the Portfolio because they generate little or no return deviation.

5. Return deviation may also be caused by adherence of the actual portfolio to the restrictions itemized in V. B and V. C.

Because the portfolio must incur transaction costs to purchase and sell securities, a trade-off must be made between incurring transaction costs and minimizing tracking error. Since transaction costs are always negative and reduce the value of the portfolio, while return deviation can be positive or negative, an analysis shall be employed to-determine when increasing return deviation is more attractive than incurring transaction costs. However, estimated tracking error shall always be maintained within the 150 basis point policy limit.

B. Specific Risk Parameters

Specific risk parameters shall limit the return deviation of the portfolio versus the benchmark. A number of models shall ensure that the risk parameters are within a tolerance to achieve the performance objective. Since the System will add or eliminate models, the specific risk parameters for each model are detailed in the Procedures manual.

D. Restrictions

- Foreign incorporated securities (including ADR's) shall not be held in the Portfolio for investment. Such securities received in corporate actions or through a change in classification shall be liquidated as cost effectively as possible.
- The benchmark of the System's Custom Wilshire 2500 Index does not contain Real Estate Investment Trusts (REITs). Consequently, the Program is prohibited from purchasing shares of REITs.
- 3. Individual security positions are limited to no more than 5% of the outstanding shares for the security. The System may maintain security positions which exceed this limit if a cost/benefit analysis of holding versus selling the position demonstrates an adverse affect on the tracking goals. However, individual securities positions shall be limited to 10% of the outstanding shares. To comply with the limit and

as cost effective, securities exceeding the limit shall be liquidated.

4. The Portfolio may not purchase the securities of primary tobacco companies as identified by the Investor Responsibility Research Center Tobacco Company List.

E. Permissible Securities

- 1. Equity securities of publicly-traded companies headquartered in the U.S.
- 2. The Portfolio may hold securities not represented in the designated benchmark. Such holdings are justified by the following reasons:
 - Liquidity constraints or excessive transaction costs, such as those required to sell certain securities obtained from corporate actions or from past benchmark reconstitutions.
 - b. Expectation of inclusion in the benchmark at the next reconstitution.

F. Corporate Actions

The quarterly rebalancing of the benchmark shall include corporate actions (e.g., tender offers, mergers, Dutch auctions, and spin-offs). However, significant corporate actions shall be included more frequently. Staff shall adjust the Portfolio on a case-by-case basis, with issues requiring in-depth analysis referred to the Research Unit.

G. Rebalancing and Trading Activity

Investors, managers, consultants, or other participants selected by the System shall perform Portfolio rebalancings as is deemed necessary for maintaining the portfolio's risk characteristics in line with those of the benchmark.

A variety of trading techniques and liquidity sources shall be utilized to obtain best execution of the approved internal trade list.

Transaction cost analysis shall be performed and evaluated on a quarterly basis for monitoring trading efficiency as compared to that of a like universe. An outside vendor may prepare this analysis.

H. Attribution Analyses

The portfolio's risk characteristics shall be monitored monthly through the attribution reports. The reports, described below, shall determine any necessary rebalancing of the actual portfolio due to variances highlighted in these reports.

1. Performance Attribution Report

A performance attribution report concerning the Program shall be generated monthly to ascribe performance to common factors, economic or industry sectors, and stock selection. Returns shall be analyzed to determine how performance is derived and if any appropriate adjustments should be made to the Portfolio.

2. Risk Attribution Summary

A risk attribution report shall be generated monthly, displaying the total, systematic, and nonsystematic risk of the Portfolio relative to the benchmark. Risk characteristics of the portfolio relative to that of the benchmark can then be analyzed to determine if any imbalances exist and if appropriate adjustments should be made to the Portfolio.

3. Over/Under Weighting Report

An over/under weight report shall be generated monthly displaying stocks with weights +/-5 basis points versus the benchmark weight. These stocks shall be evaluated for possible decrease or increase in the security's weight in the portfolio versus the benchmark weight.

VI. BENCHMARK

The benchmark shall be entitled the "CalPERS Custom DCF Benchmark" ("the Benchmark"). A nationally recognized vendor experienced in constructing benchmarks shall develop and maintain this custom benchmark. Its construction shall be a function of the style and market capitalization biases generated by the Active Domestic Equity managers in the aggregate. The Benchmark shall complement the above-mentioned biases.

The Benchmark shall vary with time as changes occur in the active manager program. Changes to the program include alteration in the

allocation to managers, the addition or deletion of managers, or changes in the active manager' benchmark as the market goes through its cycle. Consequently, the Benchmark may have risk exposures that differ significantly from the System's Custom Wilshire 2500 Index. Additionally, the composition of the Benchmark shall reflect the liquidity constraints encountered by large funds such as the System.

VII. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations on a market value basis as recorded by the System's Custodian.

VIII. DERIVATIVES AND LEVERAGE POLICY

A. Strategies

The Portfolio may utilize financial futures and options for the following purposes:

- 1. Permitting the investment of dividends received;
- 2. Equitizing cash and dividends receivable;
- 3. Allowing the adjustment of the portfolio's risk characteristics consistent with the risk exposure of the index, in the most cost effective and efficient manner available; and
- 4. Facilitating investment of cash flows related to contributions, withdrawals, or any asset allocation change.

B. Justification

Justification for the above-mentioned strategies includes the following:

- 1. Lower transaction costs compared with purchase of underlying securities;
- 2. High correlation to price movement of benchmark; and
- 3. Provide the ability to alter risk characteristics versus the benchmark without disrupting the underlying portfolio or unnecessarily increasing turnover.

C. Restrictions

Restrictions on the above-mentioned strategies are as follows:

- 1. Uncovered call writing is prohibited;
- 2. Leverage is prohibited. The use of futures contracts as specified in this Policy will not constitute leverage;
- 3. Non-exchange traded derivatives are prohibited;
- 4. Speculation is prohibited; and
- 5. Traders are limited in their authorization of trading stock futures to 1000 long contracts and 1000 short contracts, without prior written authorization from management.

D. Permissible Derivatives

Only exchange-traded derivatives will be utilized in the Program Portfolio, which may include futures and options.

E. Futures Commission Merchants (FCM)

Futures Commission Merchants are selected with the following broad range of criteria:

- 1. Low cost clearing and executing charges;
- 2. Securely capitalized firm;
- 3. Clear account statements and efficient reconciliation;
- 4. Responsive personnel;
- 5. Discrete and efficient operation;
- 6. Personal interview; and
- 7. Reference checks.

IX. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

MASTER GLOSSARY OF TERMS Equities February 14, 2005

Introduction

This master glossary identifies, defines, and clarifies the meaning of investment terms used by CalPERS in its investment policies. The purpose of the master glossary is to establish a uniform vocabulary of terms for users of these policies.

Absolute Return Fund - An actively managed portfolio that aims to produce returns in both up markets and down markets by having a low exposure to the broad market. The portfolio tends to utilize long and short positions, derivatives and leverage to accomplish its goal. This investment is usually set up as a private partnership or an offshore corporation.

Policy

Risk Managed Absolute Return Strategies Program

Absolute Return Strategic Partner - A consultant to the Absolute Return Strategies Program that is responsible for the screening, evaluating, recommending, and monitoring of absolute return funds for the program.

Policy

• Risk Managed Absolute Return Strategies Program

Acquisition - Gaining the controlling interest over an asset, usually referring to one company buying out another.

Policy

Domestic Equity Index Fund - Internally Managed

Active Investment Process - An investment process that involves a certain degree of active management as defined below. The objective of an active investment process is to outperform the broad market benchmark.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Active Management - An investing strategy that seeks to outperform the broad market benchmark by creating a portfolio that is different from the broad market benchmark. In equities, this is usually accomplished by overweighting and underweighting specific sectors or securities relative to the benchmark.

Policy

Dynamic Completion Fund - Internally Managed

Active Portfolio - A portfolio that is comprised of all of the bets against the broad market benchmark. The objective of an active portfolio is to outperform the broad market benchmark.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Active Return - The return of a portfolio that is in excess of its benchmark return. This is the return of the active portfolio.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Active Risk - The volatility of the returns of the active portfolio.

Policy

• Domestic Enhanced Index Strategy - Internally Managed

Aggregate Manager Benchmark - The weighted combination of the benchmark of all non-dynamic completion fund managers involved in a plan sponsor's investment program. The benchmarks' weights represent the managers' respective policy allocations.

Policy

Dynamic Completion Fund - Internally Managed

American Depository Receipts (ADRs) - Receipts for the shares of a foreign-based corporation held in the vault of a U.S. bank. ADRs, which are denominated in U.S. dollars, allow U.S. investors to get exposure to foreign stocks within the U.S. stock exchanges.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Asset Category Target - A set of securities with their associated weights from a particular asset category that the plan sponsor believes best achieves the purposes for which the asset category is being included in the plan's investment policy.

Policy

Dynamic Completion Fund - Internally Managed

Benchmark - A set of securities with associated weights that provides a passive representation of a manager's investment process. The benchmark return is usually used to measure a manager's performance results.

Policy

Dynamic Completion Fund - Internally Managed

Beta - The systematic risk coefficient that expresses the expected volatility of a portfolio relative to a market portfolio.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

CalPERS Custom Wilshire 2500 Index - The Wilshire 2500 Index, excluding Real Estate Investment Trusts (REITs) and tobacco stocks, and with dividends reinvested. The Wilshire 2500 comprises the top 2500 securities of the Dow Jones Wilshire 5000 Index, excluding REITs and tobacco stocks, based on market capitalization, and is reconstituted annually. The Dow Jones Wilshire 5000 is an index that measures the performance of all U.S.-headquartered equity securities with readily available price data.

Policies

- Active Domestic Equities Externally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Domestic Equity Index Fund Internally Managed
- Passive Domestic Small Capitalization Equities Externally Managed

CalPERS Financial Times Stock Exchange All World, ex-US, ex-

Tobacco - The benchmark for the international equity asset class. The benchmark is created by Financial Times and reflects specific customizations, such as the exclusion of tobacco stocks as identified by the

Investor Responsibility Research Center. The benchmark can be broken down into its underlying countries.

Policies

- Active International Equities Externally Managed
- Passive International Equities Externally Managed

Capitalization Weighted - A weighting method based on the equity market capitalization of a stock. Market capitalization is calculated by multiplying the total outstanding shares of a stock by its price per share.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Cash Buffer - An amount of the portfolio funds invested in cash equivalent securities, used for varying purposes, such as to avoid the incursion of a debit balance.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Commingled Fund - An investment vehicle that pools individual accounts of multiple investors. Each account holder owns units of the commingled fund similar to holding shares in a mutual fund.

Policy

Passive International Equities - Externally Managed

Commodity Trading Advisors - This investment style is comprised of investment managers that manage assets using the global futures and options markets as their investment universe. Commodity trading advisors provide returns that have a strong trend following component and a positive skew return distribution.

Policy

Risk Managed Absolute Return Strategies Program

Common Factor - An element of return that influences many securities and, hence, is a "common factor" in the returns on those securities. By virtue of their common influence on many stocks, common factors contribute to market return as well as residual returns of the stocks that they influence

most. Some common factors for domestic equity are capitalization, beta, price/earnings, price/book, interest sensitivity, and yield.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed

Common Factor Return - The portfolio return attributable to a particular common factor. Asset returns are decomposed into a common factor component, based on the asset's exposures to common factors times the factor returns and the specific return.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Common Factor Risk - The risk attributable to the effects of common factors.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Convertible Arbitrage - A hedge fund strategy that involves purchasing a convertible security and simultaneously shorting the common stock of the same company. The convertible security can be the company's preferred stock or debt, secured or unsecured.

Policy

Risk Managed Absolute Return Strategies Program

Corporate Actions - An action taken by a company that causes a material change in structure including, but not limited to, name, price, shares, capitalization, or other such events. Typical corporate actions include tender offers, mergers, Dutch auctions, and spin-offs.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Correlation - A statistical term that measures the degree to which the movements of two variables are related. A correlation of 1.0 indicates that the two variables tend to move perfectly in the direction, while a correlation of -1.0 indicates that the two variables move in opposite directions.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Covariance - A statistical term for the correlation between two variables multiplied by the standard deviation for each of the variables. The tendency of different random investment returns to have similar outcomes or to "covary." The magnitude of covariance measures the strength of the common movement. Covariance can be scaled to obtain the pure number, correlation, measuring the closeness of the relationship without its magnitude.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Crossing Network - An algorithm that optimally crosses buy and sell orders at a predetermined price, thereby reducing transaction costs.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Custodian - A bank or other financial institution that provides custody of stock certificates and other assets of an institutional investor.

- Active Domestic Equities Externally Managed
- Active International Equities Externally Managed
- Domestic Enhanced Index Strategy Externally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Passive Domestic Small Capitalization Equities Externally Managed
- Passive International Equities Externally Managed

Derivative - An instrument whose value is based on the performance of an underlying financial asset, index, or other investment. Classes of derivatives include futures contracts, options, currency forward contracts, swaps, and options on futures.

Policies

- Active Domestic Equities Externally Managed
- Active International Equities Externally Managed
- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Enhanced Index Strategy Externally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Passive Domestic Small Capitalization Equities Externally Managed
- Passive International Equities Externally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed
- Risk Managed Absolute Return Strategies Program

Directional Trading - A strategy used by investors that open positions, either long or short, on the belief that they are able to correctly predict the movement of price in a security. This strategy is usually employed on equity securities by hedge funds that make directional bets on value/growth, large cap/small cap, net long position or net short position. The focus can be on specific sectors, regions, etc., as well.

Policy

Risk Managed Absolute Return Strategies Program

Dismissal - Termination of the investment management contract with CalPERS.

Policy

Manager Monitoring - Externally Managed

Distressed Securities - Debt or equity securities of companies that are in financial distress. These securities tend to trade at significant discounts and attract investors that perceive a turnaround.

Policy

Risk Managed Absolute Return Strategies Program

Dividend Reinvestment Program - A plan offered by a corporation in which shareholders may purchase additional shares with cash dividends on

the dividend payment date. Often times the additional shares are sold at a discount and are commission free.

Policy

Domestic Equity Index Fund - Internally Managed

Dividend Yield - An indication of the dividend generated by a stock. The yield is calculated by dividing annual dividends per share by price per share.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Dutch Auction - A system in which the price of an item is gradually lowered until it meets a responsive bid and is sold.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Dynamic Completion Fund - A portfolio custom designed to control the misfit present in a plan sponsor's investment program.

Policies

- Active Domestic Equities Externally Managed
- Dynamic Completion Fund Internally Managed

Earnings/Price Ratio - The relationship of earnings per share to current stock price. The stock's trailing 12 months of reported earnings is often used as the earnings per share figure.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Emerging Market - A low- to middle-income country, as defined by the World Bank, whose capital market structure and regulatory mechanisms are not as mature as those in developed markets. In order to be considered appropriate for institutional investors, an emerging market must have a

functional stock exchange or very active over-the-counter market, securities available to foreign investors, and a convertible currency.

Policies

- Active International Equities Externally Managed
- Passive International Equities Externally Managed

Equitize - Combining cash with derivative instruments to produce returns comparable to the equity market.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Equity-Based Strategy - Combination of active stock selection with risk mechanism designed to minimize tracking error relative to the benchmark. Seek to add value through minor variances relative to the market in sector/industry weightings, style (growth/value) tilts or stock weightings. Key inputs into the process come from either analysts' fundamental research or quantitative models.

Policies:

- Domestic Enhanced Index Strategy Externally Managed
- Domestic Enhanced Index Strategy Internally Managed

Equity Swaps - An agreement between two parties dictating a swap with payments on one or both sides, linked to the performance of equities or an equity index.

Policies

- Domestic Enhanced Index Strategy Internally Managed
- Domestic Equity Index Fund Internally Managed

Event Driven - Strategies that invest in companies with "special situations" designed to capture price movement generated by a significant pending corporate restructuring, liquidation, bankruptcy, or reorganization.

Policy

Risk Managed Absolute Return Strategies Program

Excess Return - The return of an asset relative to the risk-free return or some other specific benchmark.

Policy

Domestic Enhanced Index Strategy - Internally Managed

External Manager - An outside money management firm retained under contract by CalPERS.

Policies

- Active Domestic Equities Externally Managed
- Active International Equities Externally Managed
- Domestic Enhanced Index Strategy Externally Managed
- Passive Domestic Small Capitalization Equities Externally Managed
- Passive International Equities Externally Managed

Factor Return - See Common Factor Return.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Financial Firewall - The legal protection from financial liability extending beyond the value of the investment in the Limited Liability Company or Limited Partnership.

Policy

Risk Managed Absolute Return Strategies Program

Financial Times Stock Exchange (FTSE) - The index publisher that produces the Custom FTSE All World ex-US Index for the System. FTSE is partially owned by the London Stock Exchange and Financial Times.

Policy

Active International Equities - Externally Managed

Fixed Income Arbitrage - This investment style is comprised of hedge funds that seek to arbitrage from price anomalies between related interest rate securities. The hedge fund shall invest opportunistically in interest rate swaps, US and non-US government bonds, forward agreements, etc.

Policy

Risk Managed Absolute Return Strategies Program

Forecasted Tracking Error - The expected standard deviation of a return, defined as the average of the model estimates of at least two providers.

- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed

Foreign Exchange Transaction - Buying or selling currency for executing a cross-border security transaction. For example, a U.S. investor purchasing a United Kingdom stock must first change sufficient U.S. dollars into British pound sterling to buy the United Kingdom stock on the London Exchange.

Policy

Passive International Equities - Externally Managed

Fundamental Beta - Predicted systematic risk coefficients (predictive of subsequent response to market return) that are derived, in whole or in part, from the fundamental operating characteristics of a company.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Fundamental Risk Model - A model used to predict the risks of individual stocks using fundamental and technical information. A covariance matrix is constructed from the factor's standard deviations and the correlations between one another. This covariance matrix can be used to predict the risk characteristics of a portfolio.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Futures - Contracts to buy or sell a standard quantity of a given instrument, at an agreed price, on a given date. A future differs from an option in that both parties are obliged to abide by the transaction. Futures are traded on a range of underlying instruments including commodities, bonds, currencies, and stock indices.

Policy

Domestic Enhanced Index Strategy - Internally Managed

General Partner - The manager of a limited partnership. The general partner has full responsibility for investing the capital. The general partner also bears personal liability for any lawsuits that arise from the investment's activities, but is often indemnified by the fund.

Policy

Risk Managed Absolute Return Strategies Program

Generally Accepted Accounting Principles (GAAP) - The common set of accounting principles, standards, and procedures. GAAP is a combination of authoritative standards (set by policy boards) and the accepted ways of doing accounting.

Policy

Risk Managed Absolute Return Strategies Program

Hedge (Hedging) - A strategy used to offset investment risk. A perfect hedge is one eliminating the possibility of future gain or loss.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Hedge Fund Administrator - The entity responsible for maintaining the accounting records for the Absolute Return Strategies Program.

Policy

Risk Managed Absolute Return Strategies Program

Historical Beta - The figure calculated by regressing 60 months of a stock's total return against the monthly total returns of a broadly diversified index, after subtracting the T-Bill's rate of return from both.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Interest Sensitivity - The figure calculated by regressing 60 months of a stock's total return against the monthly total returns of a long bond index, after subtracting the T-Bill's rate of return from both.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed

Pooled S&P 500 Equity Index Fund - Internally Managed

International Futures Contract - An agreement to buy or sell a specific amount of a commodity or financial instrument at a particular price on a stipulated future date, where the underlying commodity or financial instrument is a non-U.S. asset.

Policy

Passive International Equities - Externally Managed

Investment Partner/Limited Partner - An investor in a limited partnership. Limited partners provide the capital but have no direct involvement in the management of the fund. Limited partners have limited liability but also have limited control over the management of the fund.

Policy

• Risk Managed Absolute Return Strategies Program

Investment Style - An investment approach an investment manager takes to reach their objectives.

Policy

Dynamic Completion Fund - Internally Managed

Leverage - A condition where a portfolio's market obligation may exceed the market-value-adjusted capital commitment by the amount of borrowed capital (debt).

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed
- Risk Managed Absolute Return Strategies Program

Limited Liability Company - An alternative structure to a Limited Partnership. It is often described as a hybrid between a corporation and a partnership because it offers limited liability like a corporation and single taxation on income like a partnership.

Policy

Risk Managed Absolute Return Strategies Program

Limited Partnership - The most common format used in structuring private equity investments. Limited partners provide the capital but have no direct involvement in the management of the fund. Limited partners have limited liability but also have limited control over the management of the fund.

Policy

Risk Managed Absolute Return Strategies Program

Liquidity - The ability to quickly convert a particular investment into cash at a low transaction cost.

Policies

- Passive Domestic Small Capitalization Equities Externally Managed
- Passive International Equities Externally Managed
- Risk Managed Absolute Return Strategies Program

Long/Short Credit - This investment style is comprised of hedge funds that seek to arbitrage between the different debt instruments within a company's capital structure. The hedge fund seeks to realize returns from shifts in the credit spreads between the debt instruments.

Policy

Risk Managed Absolute Return Strategies Program

Long/Short Equity - This investment style is comprised of hedge funds that take both long and short equity positions to extract the maximum value from their investment information/analysis.

Policy

Risk Managed Absolute Return Strategies Program

Manager - A professional responsible for managing the securities portfolio of an individual or institutional investor. In return for a fee, the money manager has the fiduciary responsibility to choose and manage investments prudently for their clients. In the System's case, an internal manager is a portfolio manager on the staff, while an external manager is an outside money management firm.

Policy

Manager Monitoring - Externally Managed

Market/Book Ratio - A stock's equity market value, divided by book value at the most recently available fiscal year end (assets minus liabilities).

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Market Capitalization - A stock's current market price multiplied by the current common shares outstanding.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Passive Domestic Small Capitalization Equities Externally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Market Neutral - An investment strategy employed by hedge funds that attempts to remove or neutralize systematic market and industry risk, while focusing on stock selection risk. This strategy attempts to profit from the current direction of the market by taking both long and short positions at the same time.

Policy

• Risk Managed Absolute Return Strategies Program

Mean - The value that is to be expected on average. Among many repetitions or trials of a random process, the mean shall be the average value.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Merger - The combination of two or more companies. Strictly speaking, only combinations in which one of the companies survives as a legal entity are called mergers.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed

- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Merger Arbitrage - An investment strategy employed by hedge funds in which the stocks of the merging companies are simultaneously bought and sold in an attempt to create a riskless profit.

Policy

Risk Managed Absolute Return Strategies Program

Misfit (also referred to as Style Bias) - The difference between a manager's portfolio and its benchmark portfolio.

Policy

- Domestic Enhanced Index Strategy Externally Managed
- Dynamic Completion Fund Internally Managed

Misfit Portfolio - The stock-by-stock difference in security weights between a manager's portfolio and its benchmark portfolio.

Policy

• Dynamic Completion Fund - Internally Managed

Misfit Return - The difference in returns between a manager's portfolio and its benchmark portfolio.

Policy

Dynamic Completion Fund - Internally Managed

Misfit Risk (also referred to as Style Risk) - The variability of a manager's misfit return.

Policy

• Dynamic Completion Fund - Internally Managed

Multiple Arbitrage - An investment strategy employed by hedge funds that employ more than one arbitrage strategy within a single hedge fund. The hedge fund allocates assets based on the opportunities among the various arbitrage strategies to create the best return/risk profile for the product. The most common arbitrage strategies are merger arbitrage, fixed income arbitrage, convertible arbitrage, and volatility arbitrage.

Policy

Risk Managed Absolute Return Strategies Program

Multi-Process - Strategies that invest in multiple hedge fund styles within a

single hedge fund structure. The hedge fund allocates assets based on the opportunities among the various hedge fund styles to create the best return/risk profile for the product. The most common hedge fund styles utilized are merger arbitrage, equity long/short, convertible arbitrage, and volatility arbitrage.

Policy

Risk Managed Absolute Return Strategies Program

Nonsystematic Risk - That part of a total return that cannot be explained by a single- or multi-factor model of returns. Such components of return can be diversified away in a sufficiently large and well-diversified portfolio.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Objective Function - The objective function consists of the targets, penalties, rewards, and constraints selected in the optimization setup. It reflects the investment policy or goal.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Optimization - The best solution among all solutions available for consideration. Constraints on the investment problem limit the region of solutions that are considered and the objective function for the problem by capturing the investor's goals correctly, providing a criterion for comparing solutions to find the better ones. The optimal solution is the solution among those admissible for consideration that has the highest value of the objective function.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Optimizer - Mathematical algorithm that maximizes an objective function subject to minimizing given constraints.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Option - Contracts that give the purchaser the right, but not the obligation, to buy or sell an underlying instrument at a certain price (the exercise or strike price) on or before an agreed date (the exercise period). For this right, the purchaser pays a premium to the seller. The seller (writer) of an option has a duty to buy or sell at the strike price, should the purchaser exercise his right.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Partnership Agreement - Legal document that sets forth the terms and conditions of an investment vehicle. The partnership agreement also establishes the roles of general and limited partners.

Policy

Risk Managed Absolute Return Strategies Program

Passive Investing/Management - Investing in a manner that attempts to replicate the characteristics and performance of a market index. In theory, passive investing/management assures investment performance is neither worse nor better than the market as a whole. In practice, actual results differ from the results reported for the index due to transactions costs and tracking error.

Policies

- Active Domestic Equities Externally Managed
- Domestic Enhanced Index Strategy Externally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Dynamic Completion Fund Internally Managed

Performance Attribution - The process of attributing portfolio returns to causes. It decomposes past performance into separate components or factors contained within a multi-factor model.

Policies

 Deferred Compensation S&P 500 Equity Index Fund -Internally Managed

- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Permissible Equity for Emerging Equity Markets - The System's policy for permissible equity for emerging equity markets, as most recently amended.

Policies

- Active International Equities Externally Managed
- Passive International Equities Externally Managed

Rebalancing - Modeling a portfolio through an optimizer to obtain roughly equal buy and sell trade lists.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Reconstitution - The screening which occurs every June 30 for potential additions or deletions to the index. The screening examines the market capitalization of Real Estate Investment Trust (REIT) stocks, their content, concentration of ownership and position in the market sector. Stocks which no longer meet the criteria of the REIT index according to this policy will be eliminated from the index while new stocks which have qualified in the past year are included. A tolerance level will be applied to stocks which have dropped from the index since the past year in order to minimize transactional costs.

Policy

• Dynamic Completion Fund - Internally Managed

Return Deviation - The difference between the total return of a portfolio and the total return of the benchmark index.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Passive Domestic Small Capitalization Equities Externally Managed
- Passive International Equities Externally Managed

Pooled S&P 500 Equity Index Fund - Internally Managed

Return Factor - A common factor to which sensitivity within the active portfolio is desired due to its returns being statistically significant or reliably forecastable over time.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Risk - A measurable probability of losing or not gaining value. Risk is differentiated from uncertainty, which is not measurable. Risk in this context is also referred to as "standard deviation", which is a statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution.

Policy

Risk Managed Absolute Return Strategies Program

Risk Attribution - The process of decomposing total risk and attributing it among the factors contained within a multi-factor model.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Risk Budget - An investment approach where one uses measures of risk to assist in the allocation, management, and monitoring of the investments of an entity, such as a pension fund.

Policy

Risk Managed Absolute Return Strategies Program

Risk Factor - A common factor to which sensitivity is not desired within the active portfolio due to its returns being too volatile or unpredictable over time.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Sampling - A method of indexation whereby a representative sample of the index constituents, rather than every share in the index, are purchased.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Security Selection - Strategies that seek to mitigate market factors through a variety of hedging techniques with the objective of providing a return based solely on its stock/bond selection analysis.

Policy

• Risk Managed Absolute Return Strategies Program

Short Sale - The sale of a security that is not owned by the investor but rather is borrowed from a broker. The investor eventually repays the broker in kind by purchasing the security in a subsequent transaction.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Specialist Credit - Strategies that seek to profit from price anomalies between the variety of debt instruments (i.e., government, corporate, high yield, sovereign, etc.) and convertible bond instruments.

Policy

Risk Managed Absolute Return Strategies Program

Specific Return - The part of the excess return not attributable to common factors. It is independent of the common factors and the specific returns of other assets.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Specific Risk - The risk of the specific return.

Policy

Domestic Enhanced Index Strategy - Internally Managed

Speculation - Assumption of risk in anticipation of gain but recognizing a higher than average possibility of loss.

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed

- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Spin-Offs - Companies which are derived from other companies and begin to trade publicly on their own.

Policies

- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed

Standard Deviation - A statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. It is widely used as a measure of risk for portfolio investments. It is the square root of variance. In a symmetrical distribution, such as the normal distribution, approximately two-thirds of all outcomes fall within +/-1 standard deviation, and approximately 95 percent of all outcomes fall within +/-2 standard deviations.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Enhanced Index Strategy Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Statistical Arbitrage - This investment style is comprised of hedge funds that utilize quantitative models to remove all common sources of risk from an equity portfolio (i.e., capitalization, book to market value, dividend yield, etc.) so that only stock selection risk remains. Different from market neutral managers in that quantitative factor models are used to identify and minimize.

Policy

Risk Managed Absolute Return Strategies Program

Stratified Sampling - Selection of securities that best represent the universe by drawing from a set of cells or strata spanning two or more dimensions. The most important dimensions are market capitalization and industry representation. Cells or strata cross these dimensions and represent issues of similar characteristics. In forming the tracking portfolio, representative securities are selected from each cell.

Policies

 Deferred Compensation S&P 500 Equity Index Fund -Internally Managed

- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Style Benchmark - A custom benchmark composed of individual securities or a combination of published benchmarks with returns closely tracking an individual manager's returns. Style benchmarks help determine what portion of a manager's performance can be explained by its style and what portion can be attributed to stock selection.

Policy

Active Domestic Equities - Externally Managed

Style Bias (also referred to as Misfit) - The difference between an aggregate or individual manager benchmark and the target.

Policies

- Active Domestic Equities Externally Managed
- Domestic Enhanced Index Strategy Externally Managed
- Dynamic Completion Fund Internally Managed

Style Risk (also referred to as Misfit Risk) - The variability of an aggregate or individual manager benchmark's misfit return, usually expressed as an annualized standard deviation.

Policy

Dynamic Completion Fund - Internally Managed

Super Designated Order Turnaround System - An electronic trading system that allows large-size orders to be electronically and directly transmitted to the New York Stock Exchange and regional specialists.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Swap - Private agreement between two companies to exchange cash flows in the future according to a prearranged formula.

Policy

Passive International Equities - Externally Managed

Synthetic Strategy - Combination of obtaining market exposure via futures contracts or swaps and enhancing return through the management of the

underlying cash portfolio. The market exposure is achieved through a long S&P 500 futures position and the remaining capital is invested in money market instruments with a maturity of 90 days or longer that have greater duration or credit risk.

Policy:

Domestic Enhanced Index Strategy - Externally Managed

Systematic Risk - That portion of total return that can be explained by a single- or multi-factor model of returns. Such components of return are directly proportional to the market's return and cannot be eliminated by diversification.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Tender Offer - An offer to buy securities for cash, other securities, or both.

Policies

- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed

Tracking Error - The annualized standard deviation of the difference between the total return of the portfolio and the total return of the benchmark. The term tracking error is frequently used to describe return deviation, the total return of a portfolio, minus the total return of a benchmark index.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Passive Domestic Small Capitalization Equities Externally Managed
- Passive International Equities Externally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed

Utility - In the theory of finance, the desirability of a risky series of outcomes. In portfolio theory, utility is usually defined by a function of the mean and variance of the portfolio outcomes, which is then called a mean/variance utility function.

Policy

Domestic Equity Index Fund - Internally Managed

Variance - A statistical term for the variability of a random variable about its mean. The variance is defined as the sum of the squares of the deviation from the mean.

Policies

- Deferred Compensation S&P 500 Equity Index Fund -Internally Managed
- Domestic Equity Index Fund Internally Managed
- Dynamic Completion Fund Internally Managed
- Pooled S&P 500 Equity Index Fund Internally Managed)

Watchlist Status - Indicates a level of concern, the degree of which shall be unique to each situation and quantified by staff to the Investment Committee.

Policy

Manager Monitoring - Externally Managed

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR

MANAGER DEVELOPMENT PROGRAM (MDP) MANAGER GRADUATION

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous manager development program (MDP) manager graduation policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for Global Equity with respect to the graduation of firms from CalPERS' Manager Development Program (MDP) into a direct contractual relationship with CalPERS for the management of CalPERS' assets.

II. INTRODUCTION

Under its MDP, CalPERS provides venture capital and investment assets to small and emerging investment management firms in exchange for an equity stake in those firms. The returns from the venture capital investments augment the returns earned on the assets managed. The MDP is structured through limited liability company agreements for both venture and investment assets.

This policy permits CalPERS to contract directly with MDP firms that meet specified criteria. The Program is managed to accomplish the following:

- **A.** Diversify the system's overall Equity Program by complementing the Passive Domestic Equity Program;
- **B.** Enhance the expected return of the System's investment program;
- **C.** Hedge against active member (pre-retirement) liabilities; and
- **D.** Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for administering the MDP and the

externally managed portion of the System to the Staff through the Delegations of Authority (Delegation Nos. 89-13 and 95-50).

- **B.** The System's Investment Staff ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee.
 - 2. Developing and maintaining a procedures manual, subject to periodic reviews and updates, outlining Staff operational procedures to be used in implementing this Policy;
 - 3. Implementing and adhering to the Policy;
 - 4. Evaluating MDP firms for possible graduation under this policy;
 - 5. Recommending action with respect to the MDP firms retained to implement the Program. The Staff shall make recommendations in accordance with the Manager Monitoring Externally Managed Policy, regarding changes in the manager's contractual guidelines, or regarding any other aspect the Staff considers pertinent.
 - 6. Reporting to the Investment Committee, as needed, about the performance of the Program. The Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies immediately, and in writing, to the Investment Committee. Reports made by the Staff to the Investment Committee shall include explanations of the violations and appropriate recommendations for corrective action.
- **C. MDP Partners** shall be responsible for all aspects of compliance with their investment charter that shall include the following duties:
 - 1. Sourcing potential MDP firms for investment and providing due diligence evaluation for consideration by CalPERS;
 - Recommending the allocation of monies to the MDP firms that have been selected from that portion of assets allocated for investment under their charter. However, they are not responsible for determining any MDP firm's graduation to mainstream status for CalPERS;
 - 3. Monitoring the MDP firms and providing input and communication to the CalPERS Staff regarding the investment and business performance of these firms;

- 4. Providing business management and administrative advice and support in an effort to develop the MDP firms in which investments have been made; and,
- 5. Cooperating fully with the CalPERS Staff, custodian and General Pension Consultant concerning requests for information.
- **D. MDP firms** are responsible for all aspects of portfolio management as set forth in their respective contracts with the System and shall fulfill the following duties:
 - Communicating with the MDP Partner and Staff as needed regarding investment strategy and investment results. The MDP firms are expected to monitor, analyze, and evaluate performance relative to the agreed upon benchmark; and
 - 2. Cooperating fully with the Staff, the System's custodian and the General Pension Consultant concerning requests for information.
- E. The General Pension Consultant shall be responsible for independently monitoring and evaluating the MDP firms and for reporting recommendations, if any, directly to the Investment Committee on a quarterly basis, in accordance with the terms of its contract.

IV. MANAGER EVALUATION

CalPERS' MDP permits investment in small and emerging investment management firms with less than \$2 billion under management, whose primary investment focus is in public equity and fixed income markets, and whose primary market focus is institutional clients. The CalPERS Investment Committee has set a fixed amount of assets for the MDP, which is appropriate given the fees associated with the program. Firms in the MDP may be graduated into a direct contract with CalPERS for the management of System assets if all of the following conditions are met, and contingent upon successful negotiation of fees:

- A. The MDP firm has been successful with respect to any of the following: attracting significant assets from investors other than CalPERS; demonstrating profitability without additional assets from CalPERS; or attracting other corporate or public pension fund or endowment/foundation clients who have completed successful due diligence on the manger, regardless of the size of the assets awarded.
- **B.** The MDP firm has competitive risk-adjusted performance;

- C. Additional assets allocated to the MDP firm's investment approach and style will enhance CalPERS' overall manager structure in the relevant asset class:
- D. During the entire MDP investment period, the MDP partner has the right of first refusal for any additional assets funded to MDP firms, provided the additional assets would not constitute a breach of the diversification limit in the MDP Partner's investment charter:
- E. The Investment Committee approves an exemption from competitive bidding process resolution for the firm based on a best business practice decision (CalPERS Board of Administration Resolution No. 92-04B-2).

The System's Investment Staff will evaluate and recommend MDP firms for graduation based on the above criteria. The General Pension Consultant will provide an opinion letter.

V. **GLOSSARY OF TERMS**

The Equities Glossary of Terms is referenced in the CalPERS Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR MANAGER MONITORING - EXTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous policies pertaining to external investment manager and currency overly manager monitoring.

I. PURPOSE

This document sets forth the objectives, responsibilities and criteria ("the Policy") for Manager Monitoring - Externally Managed Program ("the Program").

II. INTRODUCTION

Under the direction of the Board and senior management of the California Public Employees' Retirement System ("the System), the System's Investment Staff ("the Staff") shall manage the implementation of investment strategies of external investment manager portfolios. In order to ensure the investments achieve strategic return and risk objectives, it is necessary to monitor each portfolio for compliance with the criteria that are specific to its particular mandate as well as reflective of the strategic role the portfolio has been selected to fulfill within the investment program.

The Staff develops specific guidelines that outline the manager(s)' strategies, portfolio characteristics, authorized investments and markets, benchmarks and performance objectives. These guidelines become part of the contractual agreement with each firm. Managers are given discretion over the selection of individual securities in the portfolio, in accordance with their guidelines, but are expected to invest the System's assets in compliance with the specific guidelines included in their contracts. The Staff shall closely monitor investment managers in order to:

- **A.** Evaluate whether managers have achieved their stated investment objectives;
- **B.** Ensure that managers adhere to their specific investment process; and
- **C.** Assess the impact of any significant investment firm changes, such as staff, client base, or ownership.

It should be noted that the System does not specifically approve individual transactions in the portfolios or impose restrictions on investing, except for those stated in the manager's contracts and guidelines, or restrictions imposed by law.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for administering the externally managed portion of the System to the Staff through the Delegations of Authority (Delegation Nos. 89-13 and 95-50).
- **B.** The **System's Investment Staff** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee.
 - 2. Developing and maintaining a procedures manual, subject to periodic reviews and updates, outlining Staff operational procedures to be used in implementing this Policy;
 - 3. Implementing and adhering to the Policy;
 - 4. Recommending action with respect to the manager(s) retained to implement the Program, in accordance with the Policy or with respect to changes in the manager's contractual guidelines, or regarding any other aspect the Staff considers pertinent.
 - 5. Reporting to the Investment Committee, as needed, about the performance of the Program. The Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies immediately, and in writing, to the Investment Committee. Reports made by the Staff to the Investment Committee shall include explanations of the violations and appropriate recommendations for corrective action.
- **C. Manager(s)** ("manager(s)") are responsible for all aspects of portfolio management as set forth in their respective contracts with the System and shall fulfill the following duties:
 - Communicate with the Staff as needed regarding investment strategy and investment results. The Managers are expected to monitor, analyze, and evaluate performance relative to the agreed upon benchmark; and

- 2. Cooperate fully with the Staff, the System's custodian and the General Pension Consultant concerning requests for information.
- **D.** The **General Pension Consultant** shall be responsible for independently monitoring and evaluating the managers and for reporting recommendations, if any, directly to the Investment Committee on a quarterly basis, in accordance with the terms of its contract.
- **E. Special Project Consultants** may be hired to provide specific advice concerning various issues pertaining to the implementation of the Program. These issues include the following issues:
 - 1. Investment research on topical issues;
 - 2. Investment policy;
 - 3. Manager research; and
 - 4. Performance measurement and analysis.

Consultants may also be used to monitor and report organizational changes at investment firms.

IV. MANAGER EVALUATION

- **A.** The ongoing evaluation of investment managers includes both qualitative and quantitative reviews of the firms. Qualitative monitoring involves reviewing the following organizational aspects:
 - 1. Ownership;
 - Staffing;
 - Growth;
 - 4. Client service;
 - 5. Investment approach;
 - 6. Business risk and
 - 7. Regulatory issues.
- **B.** Quantitative monitoring requires analysis of the implementation of the investment approach:

- 1. Investment style,
- Performance and
- Portfolio risk.

Staff shall develop and maintain specific watchlist criteria detailing the qualitative and quantitative factors to evaluate managers.

As determined by Staff through its evaluation and monitoring of managers if significant events occur which will likely affect long-term overall performance, the manager shall be placed on Watchlist Status or considered for Dismissal.

Watchlist Status - Indicates a level of concern which shall be unique to each situation and quantified by Staff to the Investment Committee. This level of concern can range from minor to major deficiencies. A recommendation for Watchlist Status shall designate a period of time to assess the capabilities and quality of a Manager's operations and include more frequent contact with the firm to monitor the conditions that led to the Watchlist Status. Managers placed on Watchlist Status shall be requested to submit a Plan of Action to address the deficiencies and shall typically remain on Watchlist Status for performance-related issues or organizational changes for up to one year to ensure that outstanding issues are resolved. Managers who do not correct outstanding issues in a timely manner shall be considered for Dismissal.

Dismissal - Staff shall recommend Dismissal of a manager if adequate improvement in the areas outlined in the Plan of Action has not been made; however, Staff may recommend Dismissal for any reason upon thirty days' notice to the manager.

From time-to-time, Managers may not incur Watchlist Status (because performance slightly exceeds the benchmark), but may not have met their performance objective (expected excess return over the benchmark) as specified in their Investment Management Guidelines. In cases where the benchmark return is surpassed, but expected excess return has not been earned during a significant period of time (three years), Staff may recommend Watchlist Status.

V. GLOSSARY OF TERMS

The Miscellaneous Glossary of Terms is referenced in the CalPERS Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR PASSIVE DOMESTIC SMALL CAPITALIZATION EQUITIES – EXTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous externally managed passive domestic small capitalization equities policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Externally Managed Passive Domestic Small Capitalization Equities Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with this segment of the United States equity market.

II. STRATEGIC OBJECTIVE

Capturing the returns of small capitalization stocks within the United States equity market at a low cost through passive management is the strategic objective of the Program.

The Program shall be managed to accomplish the following:

- **A.** Diversify the System's domestic equity investment program by allocating a portion of the portfolio to the stocks of smaller companies.
- **B.** Enhance, during a specific period, the total return of the domestic equity program.
- **C.** Hedge against active member (pre-retirement) liabilities.
- **D.** Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending the Policy. The Investment Committee delegates the responsibility for administering the passive domestic small capitalization portion of the System to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- **B.** The **System's Investment Staff** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee.
 - 2. Developing and maintaining a procedures manual, subject to periodic reviews and updates, outlining Staff operational procedures used in implementing this Policy.
 - 3. Implementing and adhering to the Policy.
 - 4. Recommending action concerning outside money management firm(s) ("Managers") retained under contract to implement the Program. The Staff shall make recommendations in accordance with the Monitoring - Externally Managed Policy, regarding changes in the Manager's contractual guidelines, and any other aspect Staff considers pertinent.
 - 5. Reporting to the Investment Committee, as needed, about the performance of the Program. The Staff shall monitor the implementation of, and compliance with, the Policy. The Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies immediately and in writing to the Investment Committee. Reports made by the Staff to the Investment Committee shall include explanations of the violations and appropriate recommendations for corrective action.
- **C.** Each **Manager** is responsible for all aspects of portfolio management as set forth in each Manager's contract with the System and shall fulfill the following duties:

- 1. Communicate with the Staff as needed regarding investment strategy and investment results. The Manager is expected to monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
- 2. Cooperate fully with the System's Staff, Custodian, and General Pension Consultant on requests for information.
- D. The General Pension Consultant is responsible for monitoring and evaluating the Managers' performance relative to the benchmark and Policy. The General Pension Consultant shall report to the Investment Committee on a quarterly basis, in accordance with its contract.

IV. PERFORMANCE OBJECTIVE

The performance objective of the strategy is outperforming the System's target benchmark for domestic equities, the custom Wilshire 2500, during a market cycle. Additionally, the portfolio shall generate performance results through time consistent with its designated benchmark, as specified in the Investment Management Guidelines, with realized return deviation of no more than 200 basis points annually. During longer periods of time, tracking error may fall between 25 basis points and 100 basis points.

V. INVESTMENT APPROACH AND PARAMETERS

A. Approach

1. Given the large asset base that the System invests, The Program shall passively manage a portion of the small capitalization equity exposure. This structure reflects a compromise between the potential for value-added through active management and the practical limitations inherent in managing a very large pool of small capitalization assets within the liquidity limitations of the small capitalization market.

The passive portfolio shall be managed to achieve the following results:

a. Diversification. A passive approach assures that the System shall achieve its goal of broad exposure to the securities included in the benchmark.

- b. Certainty of Returns. Returns from passive management shall track the benchmark with a low level of residual volatility. Therefore, the passive portfolio has a low risk of significantly under performing its benchmark.
- c. Efficiency. Deploying larger amounts of money with a passive strategy is possible.
- d. Low Cost. Management fees and transaction costs are lower for passive management than for active management.

The Managers shall construct and maintain a portfolio that is consistent with, and closely resembles, the composition and risk characteristics of the benchmark index, in accordance with the Investment Management Guidelines.

- Implementation of the program shall occur through the retention of an external manager(s). External manager selection shall occur in accordance with Section V.B of this Policy.
- 3. The System shall continuously review the viability of the investment structure, with a formal review occurring at least every five years.

B. External Manager Selection

- 1. The System shall retain managers that have recognized expertise in the analysis and selection of small capitalization domestic equity securities. The managers shall be registered or appropriately exempt from registration, with the Securities and Exchange Commission.
- 2. The System shall select the managers in accordance with the System's Contract and Procurement policy.

C. Investment Parameters

1. The Managers shall operate under a set of specific guidelines that outlines the investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities and procedures, and performance objectives representative of its strategic role within the System's investment program and the investment

risk incurred.

- 2. The implementation of this program shall comply at all times with the System's investment policies, including, but not limited to the following parameters:
 - a. Statement of Derivatives Investment Policy for External Money Managers.
 - b. Proxy Voting Policies.
 - c. Manager Monitoring Externally Managed Policy.
 - d. Manager-specific Investment Management Guidelines

VI. BENCHMARK

The benchmark for the Passive Small Capitalization Domestic Equity Portfolio shall be the DFA Small Cap Benchmark created by Richards & Tierney. This index includes all stocks in the bottom 8% of all companies by market capitalization that trade on the NYSE, NASDAQ, and the American Stock Exchange excluding tobacco stocks as determined by Investor Responsibility Research Center (IRRC).

VII. GENERAL

- **A.** Terms in this policy are defined in a master glossary of terms.
- **B.** Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations on a market value basis, as recorded by the System's custodian.

VIII. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR PASSIVE INTERNATIONAL EQUITIES – EXTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous for externally managed passive international equities policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Externally Managed Passive International Equities Program ("the Program"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and capturing returns associated with this segment of the global capital markets.

II. STRATEGIC OBJECTIVE

Obtaining broad diversification across international equity markets at a low cost in developed and emerging international markets is the strategic objective of the Program.

The Program shall be managed to accomplish the following:

- **A.** Diversify the System's equity program;
- **B.** Enhance the System's expected total return;
- **C.** Hedge against active member (pre-retirement) liabilities; and
- **D.** Consider solely the interests of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

A. The **System's Investment Committee** ("Investment Committee") is responsible for approving and amending the Policy. The

Investment Committee delegates the responsibility for administering the passive international equities portion of the System to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).

- **B.** The **System's Investment Staff's** ("the Staff") duties include, but are not limited to, the following:
 - 1. Developing and recommending the Policy to the Investment Committee.
 - 2. Developing and maintaining a procedures manual subject to periodic reviews and updates outlining Staff operational procedures used in implementing this Policy.
 - 3. Implementing and adhering to the Policy.
 - Recommending action in accordance with the Manager Monitoring - Externally Managed Policy concerning the following:
 - a. outside money management firm(s) ("Managers") retained under contract to implement the Program, and
 - b. changes in the Manager's contractual guidelines, and any other aspect Staff considers pertinent.
 - 5. Reporting to the Investment Committee, as needed, about the performance of the Program. The Staff shall monitor implementation of, and compliance with, the Policy. The Staff shall report concerns, problems, material changes, and all violations of Guidelines and Policies immediately and in writing to the Investment Committee. Reports made by the Staff to the Investment Committee shall include explanations and appropriate recommendations for corrective action.
- **C. Each Manager** is responsible for all aspects of portfolio management as set forth in each Manager's contract with the System and shall fulfill the following duties:
 - 1. Communicate with the Staff, as needed, regarding investment strategy and investment results. The Manager is expected to monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.

- 2. Cooperate fully with the System's Staff, Custodian, and General Pension Consultant concerning requests for information.
- D. The General Pension Consultant is responsible for monitoring and evaluating the Managers' performance relative to the benchmark and Policy. The General Pension Consultant shall report to the Investment Committee on a quarterly basis, in accordance with its contract.

IV. PERFORMANCE OBJECTIVE

The Portfolio shall track the performance of the benchmark with a realized return deviation (tracking error) of no more than 25 basis points annually. During short time periods, tracking error may fall between 25 and 60 basis points.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Approaches

1. Given the large asset base that the System invests, the System shall manage a significant portion of its international equity exposure in a passive investment program.

The allocation to passive management reflects a trade-off between the potential for value added through active management and the practical limitations inherent in managing a very large pool of non-U.S. assets. Management of the passive portfolio shall achieve the following:

- a. Diversification A passive approach assures that the System shall achieve its goal of broad exposure to the securities included in the benchmark.
- b. Certainty of Returns Returns from passive management shall track the benchmark with a low level of volatility. Therefore, the System shall lower the risk of significantly underperforming the benchmark.
- c. Efficiency With a passive strategy, deploying larger amounts of money is possible.

d. Low Cost - Management fees and transaction costs for passive management are lower than for active management.

The Manager is charged with constructing and maintaining a portfolio consistent with the stated performance objective in Part IV. of this document, and closely resembles the risk characteristics of the benchmark index.

To further reduce costs, the indexed portfolio may be constructed as a commingled fund as opposed to a separate account.

International equity index futures and index swaps may also be utilized to increase or decrease international equity exposure.

- 2. The program shall be implemented through the retention of an external manager(s). External manager selection shall occur in accordance with Section III.B. of this Policy.
- 3. The viability of the Program shall be reviewed continually, with a formal review at least every five years.

B. External Manager Selection

- 1. The System shall retain Manager(s) which have recognized expertise in the analysis and selection of international equity securities or approved derivatives. The Manager(s) shall be registered, or appropriately exempt from registration, with the Securities and Exchange Commission.
- 2. The System shall select the Manager(s) in accordance with its Contract and Procurement Policy.

C. Investment Parameters

The Manager(s) shall operate under a set of specific guidelines that outlines their investment philosophies and approaches, representative portfolio characteristics, permissible and restricted securities and procedures, and performance objectives representative of their strategic role within the System's Investment Program and the investment risks incurred.

Implementation of this Program shall comply at all times with the System's investment policies including, but not limited to, the

following:

- 1. Permissible Equity for Emerging Equity Markets policy;
- 2. Foreign Exchange Guidelines;
- 3. Statement of Investment Policy for Derivatives External Money Managers;
- 4. Proxy Voting Policies;
- 5. Manager Monitoring Externally Managed; and
- 6. Manager-specific Investment Management Guidelines.

VI. BENCHMARK

- **A.** The benchmark is an index that includes both developed and emerging markets components, and measures returns on an unhedged basis. The markets and securities in the benchmark are capitalization-weighted.
- B. The benchmark is the CalPERS Financial Times Stock Exchange (FTSE) All World, ex US, ex Tobacco, Capitalization Weighted Index. The markets included are limited to the countries in the System's Permissible Equity for Emerging Equity Markets Policy, and may be subject to additional restrictions at the discretion of the Investment Committee. This index excludes tobacco securities.
- **C.** An independent source (FTSE) is responsible for maintaining the benchmark as well as calculating and reporting the return of the benchmark to the System and the Manager.

VII. GENERAL

- **A.** Terms in this policy are defined in a master glossary of terms.
- **B.** The System shall make all calculations and computations on a market value basis, as recorded by the System's Custodian.

VIII. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

STATEMENT OF INVESTMENT POLICY FOR

PERMISSIBLE EQUITY FOR EMERGING EQUITY MARKETS November 15, 2004

This Policy is effective immediately upon adoption.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the permitted standards and parameters for the inclusion of country markets permitted for investment.

II. STRATEGIC OBJECTIVE

The strategic objective is to set minimum acceptable standards of investibility for emerging country equity markets to be permissible for investment by CalPERS to control risk and enhance return.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("Investment Committee") is responsible for approving and amending the Policy and delegated responsibility for administering the Policy to the System's Investment Staff (Delegation Nos. 89-13 and 95.50).
- B. The **System's Investment Staff** ("the Staff") shall review written policies and procedures of the Managers concerning compliance with the Policy. The Staff shall monitor reports from the Managers and the System's custodian to ensure the equity markets program is in compliance with this Policy.
- C. The **General Pension Consultant** shall review each country equity market's comparison to the requirements of this Policy for the purposes of establishing which markets meet the minimum thresholds of acceptability in accordance with this Policy.
- D. The **External Managers** shall be delegated the responsibility of country market and stock selection in accordance with this Policy and their guidelines that shall require minimum stock selection standards and reporting requirements on how individual companies meet minimum acceptable standards.

IV. BENCHMARK

Not applicable.

V. MASTER LIST OF COUNTRIES

- A. The master list of emerging country markets shall derive from those included in the country lists of the major emerging equity markets index providers.
- B. Each country included for review must meet the World Bank definition of an emerging country based on its per capita GNI (Gross National Income). The World Bank revisits this per capita standard annually.

VI. FACTORS OF EVALUATION

A. The factors of evaluation shall include those that can be generalized to the entire country and those that pertain specifically to the public equity market within each country. The CalPERS Board reserves the right to add, remove, revise or define factors in its sole discretion. Factors, known as the macro-factors, may be further sub-divided into sub-factors to better focus the full intent of the macro-factor.

B. Country Factors

- 1. <u>Political Stability</u>: Political stability, including progress towards the development of basic democratic institutions and principles, such as guaranteed elimination of human rights violations (such as torture), and a strong and impartial legal system, all of which are necessary to ensure political stability, support free market development, and attract and retain long-term sources of capital. This macro-factor shall include the following sub-factors:
 - a. Civil Liberties: The extent to which countries permit freedom of expression, association and organizational rights, rule of law and human rights, free trade unions and effective collective bargaining, personal autonomy and economic rights. A score of 3 (highest) means that a country has relatively good civil liberties and a score of 1 (lowest) means they are poor.
 - b. Independent Judiciary and Legal Protection: The

extent to which countries have independent judiciaries, the degree to which or the absence of irregular payments made to the judiciary and the extent to which there is a trusted legal framework that honors contracts and clearly delineates ownership of and protects financial assets. A score of: 1 (lowest) to 3 (highest) is used where the higher score indicates greater overall legal protection.

- c. Political Risk: The extent to which there exists government stability, a high quality of socioeconomic conditions, and a positive investment profile. Toward these ends this sub-factor evaluates the extent of internal and external conflict, corruption, the military and religion in politics, law and order, ethnic tensions, democratic accountability and bureaucratic quality. A score of 1 (lowest) to 3 (highest) is used where the highest score means less overall political risk exists in that country.
- <u>Transparency</u>: Financial transparency, including elements of a free press necessary for investors to have truthful, accurate and relevant information on the conditions in the countries and companies in which they are investing. This macro-factor shall include the following sub-factors:
 - a. Freedom of the Press: The structure of the news delivery system in a country and the laws and their promulgation with respect to their influence of the news, the degree of political influence and control, economic influences on the news and the degree to which there are violations against the media with respect to physical violations and censorship. A score of 3 means the press in a country is free and a score 1 means it is not free.
 - b. Accounting Standards: The extent to which publicly traded companies in the country utilize either US GAAP (Generally Accepted Accounting Principles) or IAS (International Accounting Standards) in financial reporting, and whether the country is a member of the International Accounting Standards Council. A score of 1 to 3 is used where 1 means IAS or US GAAP standards are not used and 3 (highest) means either IAS or US GAAP is used for financial reporting.

- c. Monetary and Fiscal Transparency: The extent to which governmental monetary and fiscal policies and implementation are publicly available in a clear and timely manner, in accordance with international standards. A score of 1 (lowest) to 3 (highest) is used where the higher score indicates the greatest transparency.
- d. Stock Exchange Listing Requirements: This subfactor evaluates the stringency of stock exchange listing requirements for public companies with respect to frequency of financial reporting, the requirement of annual independent audits and minimum financial viability. A score of 3 means the listing requirements are most stringent, and a score of 1 means they are the least stringent.
- 3. <u>Productive Labor Practices</u>: To facilitate economically-productive labor practices, markets shall be evaluated based on their ratification of and adherence to the International Labor Organization's (ILO) principles, which cover labor rights and prohibitions on abusive labor practices, and the degree of effectiveness of implementation through relevant laws, enabling regulations and their degree of enforcement through the judiciary process. This macro-factor shall have the following sub-factors:
 - The extent to which the country has ILO ratification for the eight core conventions. Each country will be graded on:

1) Ratified 2) Pending ratification

3) Not ratified 4) Denounced

b. Quality of Enabling Legislation: Countries shall be evaluated on whether laws exist that explicitly protect the right described in the ILO Convention, or portions of it, or whether laws exist that explicitly prohibit the Convention right, or portions of it. The objective is to evaluate fundamentally, how well the right described in the convention is protected by the law. For each law, in addition to identifying if the law exists, any shortcomings in its adequacy or completeness with reference to the relevant ILO convention shall be along with information evaluated. about regulations that implement the relevant laws.

- c. *Institutional Capacity:* The governmental administrative bodies with enforcement responsibility for enforcing labor law that exists at the national, regional and local level.
- d. Effectiveness of Implementation: The procedures that exist for enforcement and monitoring of enforcement of laws in the convention areas and evidence that exists that these procedures are working effectively; the existence of a clear grievance process; evidence that workers and/or unions utilize this grievance process; the extent to which penalties provided for in the laws are levied; and the evidence that penalties have deterrence value.

The sub-factor scores total to a maximum of 40 points per country. The sub-factors are more heavily-weighted toward the quality of enabling legislation and the effectiveness of implementation. The *Productive Labor Practices* factor scores have been rescaled on a one (lowest) to three (highest) basis, where a score of three indicates the most effective labor practices.

C. Market Factors

- Market Liquidity and Volatility: This segment measures the ability to buy or sell assets in a country in a timely manner without adversely affecting security prices. Also included in this category is an analysis of each country's stock market return volatility, including currency risk. Sub-factors under consideration for this category are listed below.
 - a. Market Capitalization: Market capitalization represents the overall size of a country's stock market. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a higher level of market capitalization (i.e., larger market).
 - b. Change in Market Capitalization: This factor represents the growth of a country's stock market over the last five years. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a higher level of market capitalization growth.

- c. Average Monthly Trading Value: This factor represents the average dollar value of shares traded, relative to the size of each market (i.e., market capitalization). A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a higher level of trading.
- d. Growth in Listed Companies: This factor represents the number of companies in each country that are publicly traded and are listed on a local stock exchange and their growth over the last five years. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting the growth of listed companies.
- e. Market Volatility (as measured by standard deviation): This factor represents the level of return volatility (risk) over the last five years in each country's stock market, attributable to both currency volatility and local market volatility. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a lower level of volatility.
- f. Return/Risk Ratio: This factor represents the percentage of total return achieved per percentage of risk in each market. This category was created so as not to penalize those markets that display a high level of positive volatility. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a higher return/risk ratio.
- 2. <u>Market Regulation/Legal System/Investor Protection</u>: This category analyzes a broad set of factors that together comprise a large portion of the investment climate within a country. This category attempts to identify the degree of legal protection for foreign investors within a country, as well as shareholder and creditors' rights. The following sub-factors are analyzed:
 - a. Adequacy of Financial Regulation: A score of one lowest) to three (highest) is assigned, with higher scores reflecting greater financial regulatory and supervisory stringency.
 - b. Bankruptcy/Creditors' Rights: This segment reflects the adequacy of creditors' rights in each market, in the

case of bankruptcy proceedings/reorganization. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a higher level of creditors' rights.

- c. Shareholders' Rights: This segment reflects the Adequacy of shareholders rights in each market. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting stronger regulations regarding shareholders' rights.
- 3. <u>Capital Market Openness</u>: Openness to foreign investment is a critical barometer of a government's commitment to free market policies. Markets are viable if they have the ability to attract and retain long-term sources of capital. Further, markets are evaluated based on the level of restriction imposed on foreign investors. The following sub-factors are evaluated:
 - a. Trade Policy: This sub-factor measures the degree to which there is oppressive government interference in free trade through deterrents such as trade barriers and punitive tariffs.
 - b. Foreign Investment: This sub-factor examines governmental barriers to the free flow of capital from foreign sources through the imposition of restrictions on foreign ownership of local assets, repatriation restrictions and un-equal treatment of foreigners and locals under the law.
 - c. Banking and Finance: This sub-factor looks at undue government control of banks and financial institutions and measures such factors as government ownership of banks and allocation of credit and the degree of freedom financial institutions have to offer all types of financial services, securities and insurance policies. Protectionist banking regulations against foreigners are also evaluated.
 - d. Stock Market Foreign Ownership Restrictions: This sub-factor examines the extent to which the local stock market restricts share ownership of public companies by foreigners.

A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a higher level of market openness.

- 4. <u>Settlement Proficiency/Transaction Costs</u>: Cost effective, efficient settlement of securities transactions is critical as the world moves to one-day settlement. This factor measures the degree of efficiency and the cost effectiveness of transacting in the markets included in this analysis.
 - a. Settlement Proficiency: This segment illustrates whether a country's trading and settlement is automated and measures the success of the market in settling transactions in a timely, efficient manner. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting an automated, efficient operational process.
 - b. Transaction Costs: This segment measures the costs associated with trading in a particular market and includes stamp taxes and duties, amount of dividends and income taxed, and capital gains taxes. High trading costs tax the returns and increase the hurdle rate of managers investing in these markets. Markets that impose a high level of taxes, or have a high level of trading costs, receive a low score. A score of one (lowest) to three (highest) is assigned, with higher scores reflecting a lower level of transaction costs. Please note that transaction costs relating to market impact associated with liquidity is reflected in the first caregory: Market Liquidity/Volatility.

VII. EVALUATION METHODOLOGY

- A. Frequency of Evaluation No less than annually
- B. Source of Evaluation – Third party expert sources shall be used to evaluate macro-factors and sub-factors. These third party sources where possible shall be readily available public sources recognized as having expert insight into the macro-factor or sub-factor subject to evaluation. Each source shall evaluate each country or market comparatively across the macro-factor or sub-factor for which it is being utilized. In the event there is no public or readily available third party source, the CalPERS Board, in its sole discretion, may contract with a source, consultant or other vendor for a custom evaluation for CalPERS according to its specifications. If a custom evaluation is utilized. CalPERS shall make the evaluation available for public inspection. All third party sources utilized are subject to the review and approval of the CalPERS Board in its sole discretion. The CalPERS Board reserves the right to make changes in the third party sources from one annual evaluation period to the next without notice.

C. Aggregating the Individual Evaluations – The General Pension Consultant shall collect the third party source evaluations and shall aggregate them according to a three-point scale: 3 points for a superior evaluation, 2 points for an acceptable evaluation and 1 point for an unacceptable evaluation. Each sub-factor shall be scored according to this three point scale, and where necessary, rescaling the scoring methodology of the third party source. The sub-factors of each macro-factor shall be weighted to derive a score for the macrofactor of which the sub-factors are part. The macro-factors shall be weighted to derive a score for each country that also shall be evaluated on a three point scale. The three point scale shall be calculated to a whole number for the 2005 evaluation, and shall be calculated to one decimal place beginning with the 2006 evaluation, for both sub-factors and macro-factors. At the country level, the calculation of scores shall be carried out to three decimal places and rounded to two decimal places for the 2005 evaluation, and shall be calculated to two decimal places and rounded to one decimal place beginning with the 2006 evaluation.

D. Weighting Scheme for Factors

- The sub-factors, unless otherwise determined by the CalPERS Board, shall be equal-weighted, or weighted in accordance with the weights used by the third party source in the event one third party source is used for the evaluation of all sub-factors within a macro-factor.
- 2. The macro-factors shall be divided into Country Factors and Market Factors with country and market factors each receiving in aggregate a weight of 50% of a country market's total score. Within the country factors and market factors the macro-factors shall be equal-weighted.
- 3. The CalPERS Board reserves the right to modify the weighting of any macro-factor or sub-factor in its sole discretion from one annual evaluation period to the next.

E. Ranking and Scoring Thresholds of Permissibility

- The CalPERS Board reserves the right to establish the threshold of minimum acceptability for a country market in its sole discretion and change it from one evaluation period to the next at its discretion. A country market currently shall receive a total weighted score of at least 2.00 on a three point scale for a determination of permissibility.
- Scoring thresholds based on the three point scale outlined in Section VII. C. for the factors shall be established at levels that are reasonably comparable from one evaluation period to the next to determine the degree to which a country market is

improving or deteriorating relative to the standards of evaluation set by the CalPERS Board. In the case where a new factor is introduced or is significantly modified the thresholds from one year to the next may not comparable, but shall be reviewed and approved by the CalPERS Board.

- The country markets shall be ranked from the highest score to the lowest score for the purposes of determining the threshold for permissibility.
- 4. For the purposes of this Policy, American Depository Receipts and Global Depository Receipts that are traded in approved markets are permissible provided that the issuer's home market, based on the country where it is headquartered, is permissible.

VIII. REPORTING PROCEDURES

- A. At least annually the General Pension Consultant shall prepare a report with the evaluations of the country markets in accordance with the Policy. This report shall include at a minimum:
 - 1. This list of countries subject to evaluation and the index publishers used to develop that list.
 - 2. A description of the evaluation methodology.
 - 3. The list of factors on which country markets are evaluated with their descriptions or definitions.
 - 4. The weighting scheme for macro and sub-factors.
 - 5. The scores for each country market with a comparison to the previous year.
 - 6. Identification of the third party sources used for evaluation with complete contact information provided to facilitate direct contact by countries with those sources.
 - A copy of this Policy with procedures and a timetable for how countries or interested parties can bring forth comments or new information.
- B. The CalPERS Board shall make this annual report available for public inspection through the CalPERS web site or its own direct distribution at its discretion.
- C. Annual Timetable for Reporting and Public Comment
 - 1. An exposure draft of the annual report shall be provided for submission to CalPERS by January 31st, or the first business day after January 31st if that date should fall on a weekend.

- 2. The draft report shall be placed on CalPERS' web site and a copy of said draft report shall be sent to the Washington, DC embassy of each evaluated country and to the head of each country's primary stock exchange.
- 3. Countries and other interested parties shall have 30 days to review the report and provide feedback or additional information to be considered.
- 4. CalPERS' third party sources shall then have 30 days to review any new information that has been submitted in a timely manner for independent verification and vetting.
- 5. At the February Investment Committee meeting, the draft report shall be presented as an information item. An interim posting at the March Investment Committee meeting shall be provided, and formal adoption of final recommendation shall occur at the April Investment Committee meeting of each calendar year.
- 6. The CalPERS Board reserves the right to modify this timetable in its sole discretion from one annual evaluation to the next.

IX. PERMISSIBLE EQUITY LIST

- A. Country markets can only be included on the list of permissible countries for investment after an adoption of a resolution by the CalPERS Board at a publicly-noticed Investment Committee meeting. Inclusion on the list of permissible countries does not compel CalPERS actually to commit assets to that country's equity market if in its sole discretion it is not considered economically attractive to do so. CalPERS may at is discretion delegate that decision to either its Staff or external money managers as they may be employed.
- B. Countries, conversely, can only be removed from the list of permissible countries in a similar manner, by adoption of a resolution. If investments in a country's public equity market exist at the time of a resolution to eliminate that country from investment the CalPERS Board shall direct the manner of divestment in its sole discretion, which may include the acceptance of a recommendation from its Staff or General Pension Consultant on the best approach to divestment.

X. CURE PERIOD

- A. Cure Period The CalPERS Board in its discretion may grant a country a cure period of up to one year before a decision to remove that country from the permissible list of investments is made. In the event that the CalPERS Board in its sole discretion grants a cure period, the following procedures shall apply:
 - Countries that are granted a cure period by resolution of the CalPERS Board at a publicly-noticed Investment Committee meeting, shall be notified formally by the General Pension Consultant after the Investment Committee meeting in April of the year in question. Notification will be sent to the Washington DC embassy of the affected country and the head of its principal stock exchange.
- B. The notification shall include a procedure document that must be followed. The procedures shall include:
 - 1. A referral to the third party sources CalPERS uses for the analysis.
 - 2. The timeline that is to be strictly adhered to for the country's response.
 - 3. The need to formally notify the General Pension Consultant and CalPERS of the intent to challenge or comment on the preliminary report.
 - 4. The requirement to include written evidence or support to back up the claim made that challenges the preliminary report that shall be sent simultaneously to the General Pension Consultant and the appropriate third party sources.
 - 5. The requirement of the challenger or commenter or its agents to meet with any appropriate third party source before the end of the cure period, i.e. before February 28th of the following year of the year in question, allowing sufficient time for the third party source to vet the information that is provided from the meeting(s) by the February 28th deadline. In the event a third party source believes that it has insufficient time to vet the challenge or the new information provided, it shall immediately notify the General Pension Consultant who shall inform CalPERS at its March Investment Committee meeting. The CalPERS' Investment

- Committee can determine in its discretion to grant more time or adhere to the stated schedule.
- 6. The cure period shall end as of March 31st of the following calendar year for the resubmission to and vote of the Investment Committee at its April meeting.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR

POOLED STANDARD & POOR'S 500 EQUITY INDEX FUND - INTERNALLY MANAGED

February 14, 2005

This Policy is effective immediately upon adoption and supersedes all previous Pooled Standard & Poor's 500 Equity Index Fund - Internally Managed investment policies.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Pooled Standard & Poor's 500 Equity Index Portfolio Fund - Internally Managed ("the Portfolio" or "the Fund"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Fund. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns while managing small affiliate funds.

II. STRATEGIC OBJECTIVE

Obtaining broad domestic equity market exposure by closely tracking the designated benchmark index is the strategic objective of the Fund.

The Fund shall be managed to accomplish the following:

- **A.** Enhance the total returns of the overall investment program for the participants of the small affiliate funds through broad U.S. stock market exposure at low cost;
- **B.** Deliver the performance results of the U.S. stock market defined as the Standard & Poor's 500 Stock Index, with broad stock diversification for the participants of the small affiliate funds; and
- **C.** Consider solely the interest of the Fund's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The System's Investment Committee ("the Investment Committee") is responsible for approving and amending the Policy. The Committee delegates the responsibility for administering the Pooled S&P 500 Equity Index Fund to the Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- **B.** The System's Investment Staff ("the Staff") duties include, but are not limited to, the following responsibilities:
 - 1. Developing and recommending the Policy to the System's Investment Committee;
 - 2. Maintaining a procedures manual which is subject to periodic reviews and updates, outlining Staff operational procedures used in implementing this Policy;
 - 3. Implementing and adhering to the Policy;
 - 4. Reporting immediately to the Investment Committee all violations of the Policy with explanations and recommendations:
 - 5. Purchasing only securities outlined in the Policy; and
 - 6. Reporting internally to senior management on the implementation of this Policy. This report shall be prepared monthly to include, but is not limited to, the following:
 - a) Current market value of the portfolio; and
 - b) Performance of the portfolio versus the benchmark as reported by the master custodian.
- C. The General Pension Consultant is responsible for monitoring, evaluating, and reporting to the Investment Committee, at least quarterly, the performance relative to the benchmark and Policy guidelines.

Monitoring shall include placing the portfolio on Watchlist Status using the following criteria:

1. If the realized annual standard deviation of monthly return deviations (tracking error) is greater than 15 basis points but

less than 20 basis points for two consecutive quarters, the Portfolio shall be placed on Watchlist Status.

2. If the realized annual standard deviation of monthly return deviations (tracking error) exceeds 20 basis points for two consecutive quarters, the Portfolio shall remain on Watchlist Status and further review may be required.

IV. PERFORMANCE OBJECTIVE

The realized annual standard deviation of such monthly return deviations (tracking error) shall be limited to 13 basis points. That is, 67% of such annual deviations of monthly returns shall be 13 basis points or less; 95% of such annual deviations of monthly returns shall be 26 basis points or less.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Investment Approaches

The Portfolio shall be constructed in a manner that is consistent with achieving the stated performance objective. This shall necessitate a broadly diversified portfolio managed in a passive index approach with risk characteristics closely resembling the benchmark index. The Portfolio normally holds all 500 securities in the Index. Since holding the exact number of shares in the benchmark can be expensive and cause constant rebalancing, an optimized index approach may be used to create an index that closely resembles the benchmark characteristics. Periodically, the portfolio may consist entirely of derivative instruments to take advantage of mispricing between the cash market and the derivatives market.

The optimization approach to be used for the Portfolio employs a fundamental risk model. Using this model, the Portfolio's risk exposures versus those of the benchmark can be defined and decomposed. Fundamental risk models measure stock returns associated with industry and other fundamental factors such as Price/Earnings (P/E), yield, and market capitalization. Such fundamental factors are often referred to as "common" factors.

A common factor is an element of return that influences many securities and hence is a "common factor" in the returns on those securities. Based on the current estimated Portfolio's exposure to industry and common factors, the volatility of returns can be

measured. The information about volatility produced by a fundamental risk model can be used to evaluate portfolio risk, decompose portfolio risk according to common factor exposures, and evaluate how much of a portfolio's return in a given period was due to each common factor exposure and how much was due to stock selection.

Tracking error can be minimized by maintaining a portfolio's risk characteristics in line with the benchmark. However, a stock market index is a purely mathematical construction. Its performance shall inevitably be different from that of any actual portfolio. Generally, such results occur because indices are constructed mathematically in ways that can never, in practice, be replicated. The following technical reasons describe why a portfolio shall not perfectly track a benchmark index:

- 1. The index is fully invested at all times. An actual portfolio shall inevitably carry a small amount of cash.
- 2. The index does not incur any costs, whereas an actual portfolio shall incur transactions costs.
- 3. The index assumes the dividend is received and its proceeds are reinvested as soon as a stock goes ex-dividend. Thus, the dividend proceeds are assumed to earn the Index rate of return from the ex-dividend date. However, the dividend may not actually be received into the portfolio for several weeks.
- 4. Published benchmark return calculations vary. Reasons for variations include but are not limited to the differences in calculations of outstanding shares for individual securities, the timing of additions or deletions of members into the benchmark, or the treatment of dividends.
- Standard & Poor's futures will contain the performance of tobacco stocks, whereas the portfolio will not contain these securities.

B. Specific Risk Parameters

It is expected that the portfolio shall be fully replicated. However, should an event arise such that the portfolio cannot be fully replicated, tolerance ranges must be placed on the portfolio's risk characteristics relative to those of the benchmark. The fundamental

risk model decomposes systematic risk into that associated with six "common factors" and fifteen economic sectors.

The common factors are reported as standardized values (by subtracting the capitalization weighted mean for each stock's common factor value and dividing by the cross sectional standard deviation), thereby allowing comparative analysis between different common factor unit values. The six common factors and their respective tolerance ranges are as follows:

- 1. **Historical Beta** The Portfolio's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 2. **Dividend Yield** The Portfolio's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 3. **Market Capitalization** The Portfolio's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 4. **Earnings/Price Ratio** The Portfolio's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 5. **Market/Book Ratio** The Portfolio's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 6. **Interest Sensitivity** The Portfolio's standardized exposure shall not exceed more than +/- .01 standard deviations from the benchmark's standardized exposure.
- 7. **Economic Sectors** The tolerance range for the fifteen economic sectors in the portfolio shall be kept within 35 basis points of the benchmark's exposure. This shall limit monthly tracking error due to each economic sector weighting difference to less than 4 basis points with 95% probability.
- 8. **Non-systematic Risk** (Residual Risk) This type of risk is caused by different individual security weightings in the portfolio relative to that of the index. Securities in the portfolio in excess of +/- 3 basis points of the security's

weight in the index shall be screened and evaluated for possible action to decrease/increase the security's weight in the portfolio towards the benchmark weight.

9. **Model Risk** - This type of risk addresses whether the model used to forecast risk produces an unacceptably large bias in the portfolio optimization.

C. Restrictions

All risk characteristics of the Portfolio must be within the permissible ranges specified in Section V.B.

D. Permissible Securities

- Common stock and ADRs included within the Standard & Poor's 500 Index.
- 2. The portfolio may temporarily hold common stocks and ADRs, which are not represented in the designated benchmark. Such holdings are justified on the basis of the following criteria:
 - Liquidity constraints or excessive transaction costs, such as those required to sell certain securities obtained from corporate actions or from past benchmark reconstitutions;
 - b. Timing of corporate action processing; and
 - c. Expectation of inclusion in the benchmark due to announced changes in benchmark constitution.

E. Corporate Actions

Corporate actions (e.g., tender offers, mergers, Dutch-auctions, and spin-offs) shall be managed on a case-by-case basis.

F. Rebalancing and Trading Activity

It is expected that the Standard & Poor's 500 Equity Index Fund shall be fully replicated. However, if there is a decision to rebalance the portfolio, it shall be primarily based upon analysis of the monthly risk and performance attribution reports. Portfolio rebalancings shall be performed as is deemed necessary to

maintain the portfolio's risk characteristics in line with those of the benchmark. At a minimum, the Portfolio shall be reviewed monthly. Internal Equity Optimizer software shall be used to effect the rebalancings. The normal objective function of the optimization is to reduce systematic and nonsystematic risk of the portfolio relative to the benchmark while minimizing transaction costs.

A variety of trading techniques and liquidity sources shall be utilized to obtain best execution of the approved internal trade list.

VI. BENCHMARK

The benchmark shall be the Standard & Poor's 500 Index excluding tobacco stocks (with dividends reinvested). This benchmark is a capitalization weighted benchmark designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries excluding tobacco stocks.

VIII. DERIVATIVES AND LEVERAGE POLICY

Derivative instruments may be used to facilitate cost and risk management of investments made in stocks publicly traded in the U.S.

A. Permitted Strategies

- Substitution: When the characteristics of the derivative sufficiently parallel those of the cash market instrument, then the derivative may be a substituted for the cash market instrument. This strategy is particularly useful when investing cash flow or liquidating investments, as the derivative can be used to manage market entry and exit points more precisely.
- 2. Risk Control: When characteristics of the derivative instrument or a combination of derivatives sufficiently parallel those of the cash market instrument then an opposite position in the derivative can be taken from the cash market instrument to alter the exposure to or the risk (volatility) of the cash instrument. This strategy is useful to manage risk without having to sell the cash instrument.
- 3. **Arbitrage:** When the price of a derivative is more attractive than either the cash market instrument or another related derivative, then the cheaper derivative shall be purchased or swapped for the cash market instrument to garner the short-

term return potential from the mispriced instrument. This strategy captures mispricing in the derivative instrument relative to either the cash market instrument or another derivative.

B. Uses

- 1. To equitize cash and dividends receivable;
- 2. To capture mispricings between the futures contract and the underlying basket of securities; and
- 3. To lower transaction costs.

C. Restrictions

- 1. Leverage is prohibited. The use of derivative instruments as specified in this Policy will not constitute leverage.
- 2. Uncovered call writing when constituting leverage is prohibited.
- 3. Traders are limited in their authorization to trade permissible derivative instruments to only the notional value of the portfolio.
- 4. Speculation is prohibited.
- 5. The fund is prohibited from transacting in shares of tobacco stocks.

D. Permissible Derivatives

Permissible derivatives may include, but are not limited to, the following:

- 1. Index Futures;
- 2. Index Options;
- 3. Options on individual stocks contained in the Index; and
- 4. Swaps that provide for the receipt of cash flows to equal the rate of return of the S&P 500 Index or any of its constituents.

E. Permissible Short-term Investments

Short-term investments are used in connection with the aforementioned Derivatives Policy. For most derivatives, collateral is required for initial margin purposes. The cash in excess of initial margin is then invested in other short-term investments. The following short-term investments are permitted:

- Investments issued and backed by the full faith and credit of U. S. Treasury;
- 2. Commercial Paper rated A2/P2 or better; and
- 3. State Street Investment Fund (STIF).

F. Counter-party Requirements

- 1. Counter-party creditworthiness shall be equivalent to "investment grade" of "A3" as defined by Moody's Investor Service or "A-" by Standard and Poor's. The use of counterparties holding a split rating with one of the ratings below A3/A- is prohibited. Staff shall notify the Chief Investment Officer if a counter-party is downgraded below A3/A- while an instrument held in the Portfolio is outstanding with the specific counter-party. The use of unrated counter-parties is prohibited.
- 2. For non-exchange traded derivatives, if the notional amount is greater than the lesser of \$10 million or 1% of the total Fund, then Staff shall not proceed without an opinion from the The General Pension Consultant. General Pension Consultant's positive opinion is required before an investment can be made. The General Pension Consultant shall provide a written opinion on the particular derivative strategy and the Investment Staff shall evaluate the potential counter-party exposure. The Chief Investment Officer and Senior Investment Officer for Public Markets must approve each non-exchange traded derivative transaction in advance.

G. General Requirements

1. The proportion of portfolio value invested in derivative instruments can grow to 100% depending on liquidity constraints and the specific strategy employed.

2. Managers must rely on the master custodian to reconcile daily cash and margin positions.

IX. GLOSSARY OF TERMS

The Equities Glossary of Terms is referenced in the System's Master Glossary of Terms.

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR RISK MANAGED ABSOLUTE RETURN STRATEGIES PROGRAM

February 14, 2005

This Policy is effective immediately upon adoption.

I. PURPOSE

This document sets forth the investment policy ("the Policy") for the Risk Managed Absolute Return Strategies Program ("the Program", "RMARS"). The design of this Policy ensures that investors, managers, consultants, or other participants selected by the California Public Employees' Retirement System ("the System") take prudent and careful action while managing the Program. Additionally, use of this Policy provides assurance that there is sufficient flexibility in controlling investment risks and returns associated with this segment of the global capital markets.

II. STRATEGIC OBJECTIVE

Broadening the opportunity set of the System's investment portfolio for achieving investment returns not available in traditional public markets investments is the strategic objective of investing in Absolute Return Strategies through the Risk Managed Absolute Return Strategies Program.

Absolute Return Strategies are offered in a limited partnership or limited liability company (LLC) form, when the majority of the underlying investments are publicly traded. Absolute Return Strategies may include, but are not limited to Relative Value Funds, Market Neutral Funds, Arbitrage Funds, Fund of Funds, and Long/Short Equity Funds.

Absolute Return Strategies shall be selected to accomplish the following:

- A. Enhance the System's long-term total return, subject to the careful management of risk, consistent with an appropriate risk budget.
- B. Hedge against long-term liabilities.
- C. Provide diversification to the System's overall investment program.

D. Consider solely the interest of the System's participants and their beneficiaries in accordance with California State Law.

III. RESPONSIBILITIES AND DELEGATIONS

- A. The **System's Investment Committee** ("the Investment Committee") is responsible for approving and amending this Policy. The Investment Committee delegates the responsibility for administering the Risk Managed Absolute Return Strategies Program to the System's Investment Staff through the Delegation of Authority (Delegation Nos. 89-13 and 95-50).
- B. The **System's Investment Staff** ("the Staff") is also known as the Absolute Return Strategies Advisory Board. This Board is comprised on senior investment professionals from within CalPERS. Their duties include, but are not limited to, the following responsibilities:
 - 1. Developing and recommending this Policy to the Investment Committee.
 - 2. Implementing and adhering to this Policy.
 - 3. Evaluating and selecting absolute return strategies investment opportunities. Staff shall seek Investment Committee approval when an allocation to a specific absolute return strategy product causes the total investment in the product to exceed \$200 million.
 - 4. Evaluating and selecting Absolute Return Fund Strategic Partner(s) through a focused competitive solicitation process. The selection process shall use specific criteria with the objective of identifying and selecting Absolute Return Fund Strategic Partner(s) that have, but are not limited to, the following characteristics:
 - a. Multiple senior personnel with significant amount of experience in the hedge fund industry.
 - b. Breadth of expertise across many fund strategies.
 - c. Highly quantitative disciplines for risk controls.
 - d. Sound quantitative process for constructing a portfolio.
 - e. Attractive fee arrangements.
 - f. Desire to work with CalPERS in a labor intensive fashion.
 - g. Committed to providing CalPERS access to the very top people within their organization.

- h. The ability to assist CalPERS in securing scarce capacity and position level transparency from hedge funds.
- 5. Monitoring selected Investment Partner(s) to determine if the partners' actions and investment results are consistent with the System's manager monitoring policies. Monitoring may be accomplished through a Absolute Return Fund Strategic Partner(s) or Staff.
- 6. Reporting to the Investment Committee monthly performance reporting, concerns, problems, material changes, and all violations of Guidelines and Policies immediately and in writing, along with explanations and appropriate recommendations for corrective action.
- 7. Overseeing the reconciliation of each investment by the Hedge Fund Administrator in accordance with US Generally Accepted Accounting Principles on a monthly basis. The Hedge Fund Administrator shall provide an accounting ledger each month to the Staff.
- C. The **Absolute Return Fund Strategic Partner(s)** duties shall include, but are not limited to, the following responsibilities:
 - 1. Conducting the initial screening of potential absolute return fund investments.
 - 2. Performing front and back office due diligence and evaluating the legal terms of prospective absolute return fund investments.
 - 3. Preparing a recommendation to staff on any action that is to be taken (hire or fire, reduce or increase exposure) within the Risk Managed Absolute Return Strategies Program.
 - 4. Monitoring and evaluating the performance of the absolute return funds in the Risk Managed Absolute Return Strategies Program relative to the appropriate benchmark and this Policy, in accordance with its contract with the System.
 - 5. Constructing and managing a fund of funds for the Program.
- D. The **General Partner(s)** is responsible for all aspects of portfolio management as set forth in the General Partner's contract with the

System and shall fulfill the following duties:

- 1. Communicate with Staff as needed regarding investment strategy and investment results. The General Partner(s) is expected to monitor, analyze, and evaluate performance relative to the agreed-upon benchmark.
- 2. Cooperate fully with the System's Staff, Hedge Fund Administrator, and Absolute Return Fund Strategic Partner(s) on requests for information.
- 3. Comply completely with the System's reporting requirements, including but not limited to, accounting for fees and expenses.

IV. PERFORMANCE OBJECTIVE

Absolute Return Funds are highly specialized investments; therefore, the System shall establish performance objectives for each absolute return fund. These objectives shall be set at levels that are consistent with the strategy employed by the hedge fund manager.

A. Risk Managed Absolute Return Strategies Program

1. Target Level Risk

The Program level risk target shall be no greater than one-half the five year annualized volatility of CalPERS' Internal Wilshire 2500 Equity Index Fund, and that the Program shall be managed so that in any one month the decline in net asset value shall not exceed 10%.

2. The Return Target

On an annual basis and for purposes of performance appraisals, the return target shall be the return of the one-year U.S. Treasury Bill rate plus 5% over a full market cycle (three to five years).

3. Liquidity

Expected liquidity for the majority of absolute return funds and fund of funds within the Program shall be subject to an initial lock-up of 1-year and quarterly liquidity thereafter.

V. INVESTMENT APPROACHES AND PARAMETERS

A. Approach

- 1. Absolute return funds shall compliment the traditional active management vehicles in the Global Equity Markets and AIM Investment Programs. Absolute return fund investments may include exposure to leverage or short selling of securities or both. The allocation of assets for the Program shall come from the active or passive investments from the Global Equity Markets Program.
- 2. The Program shall use absolute return funds to generate the attractive risk-to-reward characteristics provided by these specialized and unique investment strategies.
- 3. The Program shall invest in absolute return funds through partnerships or other formation structures, e.g., limited liability companies (LLCs), where the general partner(s) or fund manager(s) have expertise in the specified mandates and in related areas material to the success of each investment strategy. The justifications for a limited partnership or LLC structure include, but are not limited to, the following:
 - a. Financial Firewall: The limited liability of a partnership or LLC arrangement is important since absolute return funds sometimes use derivatives and leverage. The System, as a limited partner, has the benefit of this limited liability.
 - b. Access Unique Approaches with Limited Liquidity: The key to successful absolute return fund investing is in selecting vehicles where the specialization of the investment is sufficiently unique that the partnership or LLC structure is justified in limiting asset growth in the strategy, ensuring a proper investment time horizon, and protecting the System from the vagaries of other investors who may not be like-minded. The goal is to ensure that the approaches selected for recommendation do not mirror traditional active management. The fees and expenses of investing in absolute return funds may be higher than traditional active management. The System shall not fund absolute return funds that simply invest in traditional active management approaches at higher fees.

- c. Access Unique Talent: The specialized and focused nature of absolute return funds often requires more specialized investment skills than those needed for traditional active management. Some of these investment professionals manage money only in the partnership format or LLC structure.
- 4. The negotiation of terms in absolute return funds shall protect the interests of the System, and shall address at a minimum the following issues:
 - a. Alignment of Interests: Vehicle terms including fees shall be negotiated to ensure the alignment of the General Partner's interest with the System. The management fee, carried interest, performance objective, return of capital, lock-up period, clawbacks, and other relevant terms shall protect the System in the event of adverse performance results, while ensuring that the limited liability status is maintained. Where appropriate, a return of capital commitments shall be negotiated.
 - b. Leverage: It is recognized that absolute return strategies may expose the System's assets to leverage, meaning that a partnership's market exposure may exceed the market value-adjusted capital commitment by the amount of borrowed capital. Therefore, investments should only be made in investment vehicles (specific to absolute return funds) which provide limited liability. The limited liability structure protects the Risk Managed Absolute Return Strategies Program from losing more than its invested capital.
 - c. Reporting Requirements: To appropriately account for fees, individual expenses, invested capital, and any other items affecting the investment, Staff shall prescribe a standard reporting format, which all the General Partners shall follow.
- 5. The Staff and consultant shall continually review the efficacy of absolute return fund investment vehicles. The Staff shall present a formal review of the approach to the Investment Committee on an annual basis.

B. Investment Selection

- 1. Absolute return funds may be selected if they enhance the Risk Managed Absolute Return Strategies Program's ability to achieve the overall investment objective. Absolute return funds may include investments in domestic equity, international equity and fixed income securities that may include, but are not limited to, the following *strategies* (as defined by the leading industry-recognized hedge fund indices):
 - a. Directional Trading
 - b. Event Driven
 - c. Multi-Process
 - d. Security Selection
 - e. Specialist Credit
- 2. The following absolute return fund investment *styles* shall be considered for the Risk Managed Absolute Return Strategies Program that may include, but are not limited to, the following (as defined by the leading industry-recognized hedge fund indices):
 - a. Convertible Arbitrage
 - b. Distressed Securities
 - c. Fixed Income Arbitrage
 - d. Long/Short Credit
 - e. Long/Short Equity
 - f. Market Neutral
 - g. Merger Arbitrage
 - h. Multiple Arbitrage
 - g. Statistical Arbitrage
 - h. Commodity Trading Advisors
- The Staff shall develop and maintain selection guidelines for prospective absolute return funds. These criteria shall be subject to review by:
 - a. The Absolute Return Strategies Advisory Board,
 - b. The Absolute Return Fund Strategic Partner(s), and
 - c. The consultant representing the CalPERS' Investment Committee to ensure conformity to the return and risk expectations of the CalPERS' Investment Committee.

The selection guidelines may include, but are not limited to the following:

- a. Minimum requirements with respect to the following:
 - (1) General Partner Investment Experience
 - (2) Basic Investment Vehicle Terms
 - (3) Investment Goals and Objectives
 - (4) Degree of Leverage
- b. Performance Criteria
- c. Due Diligence Process
- d. Legal Constraints or Requirements
- e. Reporting Requirements
- f. Quality control processes including, but not limited to, investment monitoring and risk control
- g. Other relevant parameters that may apply

C. Investment Parameters

Investment partner(s) in Absolute Return Strategies shall operate under a limited partnership agreement, or other similar legal structure, which includes specific, written investment guidelines. The guidelines shall outline the investment partner(s)' investment philosophy representative and approaches, portfolios characteristics. permissible and restricted securities procedures, and a performance objective commensurate with the investment risk to be incurred.

Implementation of this Program shall comply at all times with the applicable System investment policies.

D. Risk Parameters

Each RMARS investment shall have specified a set of risk parameters appropriate for that investment. Staff shall utilize the risk platform that has been internally developed to measure and monitor quantitatively the economic and investment risks associated with the Program, and shall further utilize the judgments and advice of the ARS program Strategic Partner(s) and the General Investment Consultant to the Investment Committee to assess the qualitative risks inherent in managing the Program.

VI. BENCHMARKS FOR ABSOLUTE RETURN FUNDS

Due to the wide range of markets in which these investments shall be made, appropriate benchmarks shall be established for each specific absolute return fund investment vehicle. The benchmark shall reflect the investment opportunity set or risk profile of each investment. These

benchmarks shall be established prior to investment and shall be documented with each absolute return fund manager.

VII. GENERAL

- A. Terms in this policy are defined in a master glossary of terms.
- B. Investors, managers, consultants, or other participants selected by the System shall make all calculations and computations on a fair-market-value basis as recorded by the System's Hedge Fund Administrator.

VIII. GLOSSARY OF TERMS

The Equity Glossary of Terms is referenced in the System's Master Glossary of Terms.